Introduction/purpose

Ophthalmology referrals are predominantly made from general practitioners and optometrists in primary care, who receive differing types and levels of training and are equipped with different instrumentation. Pierscionek et al (1) suggested that there is likely to vary in the types of cases and conditions seen by general practitioners and optometrists, but that there should not be a difference between the two groups in terms of accurate, high quality and efficient referrals.

The accuracy, quality, type and outcome of referrals to the hospital eye service (HES) in Walsall was unknown. We were also unclear about whether systematic differences in referrals existed between optometrists and general practitioners. To ascertain this information, a hand audit was required as patient records are paper based.

The purpose of this study was to determine whether any differences exist between referrals from general practitioners and optometrists, particularly in terms of conditions referred, referral quality, concordance between referred diagnosis and ophthalmic diagnosis on discharge. We worked with the local hospital in Walsall to audit 700 referrals to ophthalmology.

Methods

• We gained approval from the Caldicott Guardian at Walsall Manor Hospital and also sought approval from the Clinical Commissioning Group to undertake this audit. A report was run from the hospital system to identify referrals into the hospital eye service from Q4 2013 retrospectively until 1000 notes containing a referral had been reached
• A data collection template was developed in Excel, using automated fields and data validation processes where possible to minimise error.
• Processes to ensure timely retrieval and couriers of notes was agreed with the hospital audit and compliance team.
• 4 team members from public health participated in auditing records in April 2014. Each set of notes were audited using the latest referral into the hospital eye service.
• Data were analysed, and statistical analyses performed.

Results/impact

We audited 701 patient records involving referrals into the hospital eye service. Of these, 424 were from optometrists, 97 were from GPs, and the remaining 180 were referrals from orthoptics, retinal screening service or internal referrals. 84% of records were from 2009 onwards – the full distribution of years of referral are shown in figure 1.

Repetition letter completeness for basic information was excellent for both GPs and optometrists. Medical and ophthalmic specific information contained within referral letters was heterogenous (figure 2). However, degree of urgency of referral was seldom stated – 77% of records were devoid of any indication of urgency. 13% referrals were stated as routine, 7% were ‘soon’, and 3% were urgent. The average number of days between referral and 1st appointment are shown in table 1.

Concordance (positive predictive value) in referred condition and diagnosed condition at HES between optometrists and ophthalmologists was 76.2%, and between GPs and ophthalmologists was 62.9%.

Discussion

This was the first audit with the local hospital in Walsall since public health relocated under the auspices of the Local Authority. We encountered a number of difficulties in gaining access to patient records even when an audit proposal had been signed off by the Caldicott Guardian and the clinical commissioning group. We are hopeful that future audits will be easier now relationships with the correct personnel have been established, and systems have been developed.

We would have preferred to have audited referrals selected at random, however due to difficulties in collating and gaining access to records, we were obliged to audit the identified and available referrals for this project. We hope to strengthen this aspect of our methodology for future audit work.

We found good concordance between referrals into Walsall’s HES which is very similar to other published studies. Six referrals (1%) by GPs or optometrists were discharged from HES with a ‘normal vision’ diagnosis which is a tiny minority of cases. There will always be false positives referred but this is an issue that we should be aware of, particularly given budgetary pressures and constraints faced by the healthcare system.

Conclusion

Outcome 2 of the UK Vision Strategy aims to ‘improve the co-ordination, integration, reach and effectiveness of eye health and eye care services’. This research has provided new insight into referrals to Walsall’s HES leading us to identify aspects of the referral process and pathway that are working well, and those that are in need of refinement and change.

The positive predictive value comparing referred and HES diagnosis for GPs and optometrists with ophthalmologists was excellent (62.9%, 76.2%, respectively). We recognise that the types of conditions seen and referred by GPs and optometrist are heterogeneous, and also that skills, training, resources and instruments available differ between each group. GPs were most likely to refer conditions to the HES relating to disorders of the eyelid, lacrimal system and orbit, whereas optometrists most commonly refer for disorders of the lens (predominantly cataract). These observations are in line with previous studies (1,2).

The following points are for further consideration and action which will likely have a tangible impact on outcome 2 of the UK Vision Strategy:
1. Referrals where ophthalmic data were omitted: We recognise that some conditions do not warrant, or perhaps preclude inclusion of certain optometric data, but also recognise that referral standards need to be reiterated across the board.
2. Lack of inclusion of ‘degree of urgency’ on referral letters: Clear inclusion of this piece of information is omitted on the vast majority of referrals, but is important to assist with prioritisation and timely appointments.
3. Standardisation of referral forms used by GPs and optometrists: referral forms often used very different structures and contained differing levels of information. A standard template should be considered and disseminated to improve referral quality further, stressing the importance of indicating ‘urgency’.

References


Contact details
Mr Matthew Fung, Public Health Specialty Registrar; Dr Paulette Myers, Consultant in Public Health; Prof. Nizar Hirji, Consulting Optometric Advisor. Walsall Council.