Optimising the care pathway for patients suspected by primary care to have glaucoma in terms of effectiveness of referral refinement: The Health Innovation & Education Cluster (HIEC) Glaucoma Pathways Project

Gokulan Rattrajan1,2, Wendy Newsom1,3, Stephen Vernon1, Cecilia Fenerty1, David Henson1, Fiona Spencer1, Yanyang Wang1, Robert Harper1, Andrew McLaugh1, Lisa Collins1, Mike Parker1, Robyn Hudson1, Peng Khaw2, Richard Wormald4, David Garway-Heath5, Rupert Bourne1,4,5

Author Affiliations: North East, North Central London and Essex Health Innovation & Education Cluster1, Vision and Eye Research Unit (Anglia Ruskin University)2, Hinchingbrooke Hospital2, Nottingham University Hospitals NHS Trust3, Manchester Royal Eye Hospital4, Gloucestershire Hospitals NHS Foundation Trust5, Postgraduate Medical Institute (Anglia Ruskin University)2, Moorfields Eye Hospital NHS Foundation Trust and UCL Institute of Ophthalmology5, Moorfields at Bedford Hospital.

Background

- There is an increasing number of patients being referred for suspected glaucoma in the UK.
- Reasons include an aging population, advances in diagnostic and screening tools in community optometry practices and changes in national guidelines with regard to glaucoma care.1,3
- Glaucoma Referral Refinement schemes (GRRS), where an optometrist with specialist interest in glaucoma (OSI) reviews the patients referred from non-specialist optometrists (non-OSI), offer an effective method of reducing unnecessary referrals.
- Opinion is divided on the optimal pathway design, triaging and referral criteria.4,5

Methods

The unnecessary referral rate (URR) was defined as a referral by an optometrist for a glaucoma opinion where the patient is subsequently discharged by the Ophthalmologist on first review in the clinic.

The URR and temporal trends in referral activity for OSIs in 4 distinct referral schemes at UK centres (Huntingdon, Manchester, Gloucestershire and Nottingham, figure 1) were retrospectively analysed to include referral schemes at UK centres (Huntingdon, Manchester, Gloucestershire and Nottingham, figure 1) were retrospectively analysed to include

- Information just before the introduction of the April 2009 National Institute and Health and Clinical Excellence (NICE) glaucoma guidelines, post NICE information just before the introduction of the April 2009 National Institute and Health and Clinical Excellence (NICE) glaucoma guidelines, post NICE
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Results

- 1086 patients were analysed.
- URR to the hospital from OSIs was 14.1% compared to 36.1% from non-OSIs.
- Increase in the URR post-NICE compared to pre-NICE in both groups (for OSIs: 6.3% to 15.2% and for non-OSIs 29.2% to 35.0%).
- An elevated intra-ocular pressure (IOP) was the commonest reason for referral for both OSIs and non-OSIs, 28.7% and 36.1%.
- Proportion of referrals generated solely for an elevated IOP increased in both groups post NICE, 19.9% to 23.0% for OSIs and 19.0% to 45.1% for non-OSIs.
- Referrals from OSIs were less likely to be discharged by the hospital.
- 14.7% of referrals from an OSI for an elevated IOP alone failed to note the presence of an optic disc defect that was subsequently identified by the hospital.

Discussion

- OSIs can reduce the URR of patients being reviewed in secondary care.
- The secondary care pathway is valuable in ensuring patients with glaucoma are correctly diagnosed and also in preventing missed cases of glaucoma who might be inappropriately discharged in a poorly designed scheme.
- There is too much emphasis on IOP during the assessment of patients by both OSI and non-OSIs, particularly post-NICE
- The risk stratification of referrals from non-OSIs to direct high risk patients straight to secondary care, and low risk patients to OSIs can reduce the URR of patients being reviewed in secondary care.

Suggested Solution

- Creation of a national framework for glaucoma referral refinement in England with uniformity in referral criteria.
- Full comprehensive eye examination be carried out in all GRRS including Goldman tonometry, Van Herick or gonioscopy, dilated disc assessment and automated visual field testing.
- GRRS to be community based.
- Referral criteria within GRRS to follow national guidance such as the JCG, and to possibly adopt risk stratification whereby those patients with significant risk of glaucoma are seen directly by the Ophthalmologist in secondary care.

Reference: