Outcomes of Glaucoma Referral Filtering Services in Primary Care Optometry in England from 2021 to 2024

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Introduction

- Glaucoma referral filtering services are long established and advocated by NICE Guidelines NG18[1] and GIRFT[2] to reduce the burden of false positive referrals on hospital eye services (HES).
- Glaucoma referral filtering services are effective[3,4] with service evaluations finding a deflection rate of between 63 and 79%[5-8] for GRRS and 53 - 54%.for GERS. [9,10]
- We provide the first large-scale multi-locality evaluation of GRRS and GERS
- The outcomes of two levels of filtering pathways delivered through Primary Eyecare Services are reviewed: The Glaucoma Repeat Readings Service (GRRS), commissioned within 26 Integrated Care Boards (ICBs), and the Glaucoma Enhanced Referral Service (GERS), commissioned within 11 ICBs.

Methods

- Glaucoma filtering services allow additional measurements and/or investigation to be undertaken by primary care optometrists to determine whether a glaucoma referral to HES is required.
- Outcomes for all GERS and GRRS episodes delivered by Primary Eyecare Services via primary care optometry practices from April 2021 to March 2024 were analysed using the clinical data and outcomes recorded through the IT platform.
- Primary outcomes for both services are discharge to routine sight testing or referral to HES with appropriate urgency and clinical report.

Level 1
Glaucoma Repeat Readings Service (GRR)

For patients with IOP by non-applanation tonometry ≥24mmHg and no other signs of glaucoma.

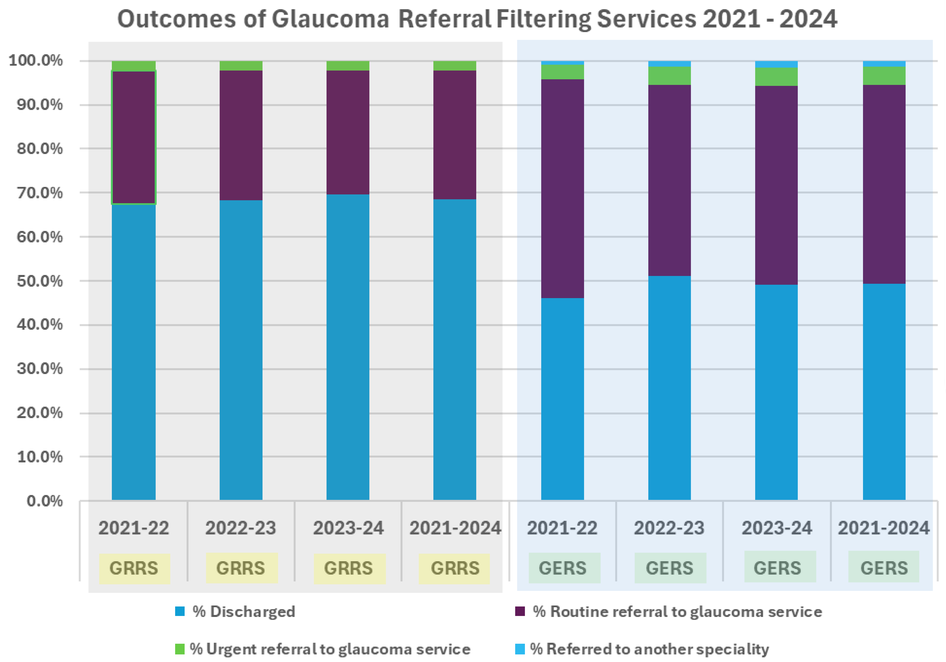
Repeat intraocular pressure (IOP) by applanation tonometry (AT). Repeat visual field (VF) on some pathways

Level 2
Glaucoma Enhanced Referral Service (GERS)

For patients with non-urgent signs suggestive of glaucoma or ocular hypertension (OHT)

Delivered by primary care optometrists with additional glaucoma accreditation

Includes identification of risk factors, AT, assessment of the anterior chamber, optic nerve head, and VF.



Results

Glaucoma Repeat Readings Service (GRRS)

20,112 patients → **68.5%** (13,783) assessed & discharged → **58.7%** following 1st assessment **9.8%** following 2nd → **31.5%** (6,329) referred to secondary care

Glaucoma Enhanced Referral Service (GERS)

14,376 patients → **49.2%** (7,080) assessed & discharged → **50.8%** (7,296) referred to secondary care → At least **20,863** unnecessary secondary care glaucoma appointments avoided

Conclusions

- Both GRRs and GERS provide an effective reduction of false positive referrals to the HES, with a ≈50% deflection rate for GERS, and ≈70% for GRRS.
- There is substantial potential to improve health system efficiency through consistent commissioning of GRRS and GERS across England.

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