The safety and effectiveness of glaucoma filtering services and shared care pathways in the UK

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THE COLLEGE OF OPTOMETRISTS

Contents

Executive summary

Glaucoma is a chronic, progressive eye disease and a leading cause of irreversible sight loss in the UK, accounting for around 10% of sight impairment registrations. It affects approximately 2% of adults over 40, rising to around 10% of those over 75, and the number of people with glaucoma is projected to increase by over 10% in the next decade due to an ageing population.

The condition is typically asymptomatic in its early stages, with over half of cases undiagnosed. Most suspected glaucoma is identified through sight testing in primary care optometry, yet diagnostic tests have limited predictive value in low-prevalence populations. As a result, between 20% and 65% of referrals to hospital eye services (HES) are historically discharged at first visit.

Glaucoma currently accounts for approximately 20-25% of all HES outpatient activity. Combined with longstanding hospital workforce shortages, rising demand for follow-up and elective care backlogs, this has led to delays in diagnosis and treatment, increasing the risk of avoidable and irreversible sight loss. Organisations such as NICE and the Royal College of Ophthalmologists have highlighted the need for new care models that better utilise primary care capacity while maintaining patient safety. Glaucoma care represents a clear example of where current outpatient models are not sustainable and where pathway redesign can directly support system priorities for integration, prevention and future demand.

The case for change: alignment with commissioning priorities

Integrated, local care

Evidence shows that optometrists can safely undertake referral filtering, monitoring and management of low-risk ocular hypertension (OHT) and stable glaucoma, with clinical decision-making comparable to hospital-based care. Optometry-led glaucoma referral filtering services (GRFS) and community shared care pathways enable care to be delivered closer to home, while remaining fully integrated with secondary care through agreed protocols, oversight and governance. These pathways strengthen collaboration between primary and secondary care, improve access and choice for patients, and make better use of the wider eye care workforce. This supports local models of care and reduces over-reliance on hospital outpatient clinics for stable and low-risk activity.

Recovery and transformation to sustainable outpatient care

GRFS directly support outpatient efficiency by refining referrals to hospitals. Across multiple UK models, evidence demonstrates that these services:

- Substantially reduce false-positive referrals and first-visit discharges
- Prevent 40-75% of onward referrals to HES, depending on service design
- Release significant volumes of outpatient capacity

Enhanced case-finding, referral refinement and virtual review models show particularly strong performance, with high agreement between optometrists and ophthalmologists and very low false-negative rates. Some services have released thousands of HES appointments. Shared care pathways further support outpatient recovery and transformation by shifting long-term follow-up of stable and low-risk patients out of hospital settings. This reduces follow-up backlogs and enables HES to prioritise patients with complex disease or high risk of vision loss: directly supporting elective care recovery and safe waiting list management.

Prevention and early diagnosis

Given that glaucoma-related vision loss is irreversible, prevention and early diagnosis are critical. GRFS improve early detection by:

- Increasing the proportion of true-positive referrals reaching HES
- Reducing delays caused by unnecessary hospital appointments
- Supporting timely escalation for those at genuine risk

In particular, repeat measures services allow equivocal findings from sight tests to be clarified and have been shown to avoid up to three quarters of suspected glaucoma or ocular hypertension referrals without compromising safety. By improving referral quality and timeliness, these pathways reduce the risk of preventable sight loss and associated long-term health and social care costs.

Population health management and reducing unwarranted variation in England

Access to GRFS and shared care pathways is currently inconsistent across England, contributing to unwarranted variation in referral quality, waiting times and outcomes. This variation disproportionately affects people in deprived communities and ethnic minority groups, who are at higher risk of advanced disease at presentation. Standardised commissioning of community-based glaucoma pathways would enable integrated care boards (ICBs) to achieve population health management principles by:

- Planning services around population need and risk
- Targeting areas with poor access or late presentation
- Reducing postcode variation in pathways and outcomes

These models provide system leaders with practical levers to improve equity, consistency and outcomes at scale.

Existing glaucoma services in Northern Ireland, Scotland and Wales

Health policymakers should maintain existing GRFS in Northern Ireland (NI), Scotland and Wales, making full use of the optometry workforce and supporting those with advanced qualifications to deliver more care closer to home. Roll out of the new Community Glaucoma Service in Scotland and WGOS4 glaucoma monitoring services in Wales should continue to be supported. Shared care pathways beyond OHT patients should be introduced in NI to help improve patient outcomes.

Regular clinical audits and the publication of safety and patient-reported outcomes are required to grow the evidence base for delivering safe and effective care.

Optimal use of resources

The evidence base demonstrates that optometry-led GRFS and shared care pathways are safe, effective and acceptable to patients, with outcomes comparable to hospital care for appropriate cohorts. Both referral filtering and shared care models provide long-term system benefits, including released hospital capacity, reduced delays, improved flow and better outcomes for high-risk patients. These pathways ensure care is delivered in the most appropriate setting, maximise workforce skills, and support long-term system sustainability in the context of rising demand.

Patient experience and wider benefits

Patient satisfaction with both GRFS and shared care pathways is consistently high. Patients value shorter waiting times, reduced travel, greater convenience and improved communication. Community-based care also offers environmental benefits through reduced travel and lower carbon emissions, aligning with broader national environmental sustainability goals.

CONCLUSION

The evidence is clear that maintaining hospital-only glaucoma pathways is not viable. Rising demand, constrained hospital capacity and unwarranted variation create increasing risks to patient outcomes and system sustainability. Optometry-led glaucoma referral filtering services and shared, community-based pathways for low-risk patients offer a proven, scalable solution that aligns directly with health systems' priorities for integrated, local care, recovery of outpatient care, prevention and early diagnosis, population health management and optimal use of resources. These models are not an incremental improvement but a strategic shift in how long-term eye conditions should be managed: releasing hospital capacity, protecting patients from avoidable harm and creating a more resilient eye care system fit for an ageing population.

Evidence review

1. Background: The demand for hospital glaucoma services is increasing

Glaucoma is a chronic disease caused by damage to the optic nerve and can result in irreversible loss of vision[1]. It is the second leading cause of blindness in the UK, responsible for 10% of all registrations of sight impairment, with a significant impact on wider health and social care services. The most common form, primary open angle glaucoma, affects approximately 2% of the population over 40 and the risk increases with age, affecting 10% of people aged over 75[2,3].

Despite a low incidence of glaucoma, the disease is lifelong, any loss of vision is irreversible, and the course is highly variable, meaning long-term regular eye care is required to reduce or prevent progression[1,4]. Across the UK, glaucoma makes up approximately 20-25% of all hospital eye services (HES) outpatient activity[5, 6]. In addition, glaucoma prevalence modelling predicts that the number of people with primary open angle glaucoma in the UK will increase by 12% between 2025 and 2035, due to a growing and increasingly aging population[7].

In early stages, glaucoma is typically asymptomatic, and more than 50% of cases of glaucoma remain undiagnosed[2,4]. In the UK, the majority (~95%) of referrals for suspected cases of glaucoma are initiated following routine sight testing and opportunistic case finding by primary care optometrists[2,8,9,10]. However, due to the relatively low prevalence of glaucoma, the diagnostic tests (e.g. optic disc, intraocular pressure and visual field assessments) used in glaucoma detection have a low positive predictive value, and there is difficulty detecting early and/or subtle signs. As such, there is a lack of an ideal combination of tests that are suitable for screening [2,10,11].

Early studies of glaucoma referrals arising from sight tests showed that the selection and application of specific tests, interpretation of results and subsequent decision making varied widely[5,12]. Thus, many referrals from a sight test-based case finding route to secondary care for formal diagnosis and management have been associated with a high false positive rate, ranging from 20-65%[5].

With longstanding workforce and capacity constraints in secondary eye care, combined with a high rate of false positive referrals to glaucoma clinics, there is significant and growing pressure that reduces the ability of HES to provide timely treatment, [6,13]. Widespread changes to care pathways are needed to manage this rising demand and reduce delays in access to eye care for those at highest risk of avoidable and irreversible sight loss[5, 6, 12, 13,14].

2. Optometry-led glaucoma filtering services are safe and effective

Refining referrals from sight tests in primary care will help reduce first visit discharge rates and avoidable appointments within secondary eye care. To improve the quality and accuracy of referrals, locally commissioned glaucoma referral filtering services (GRFS) have been established across the UK[5, 6, 12].

These are broadly categorised into one of three subtypes, varying according to the extent of optometrist qualifications and further testing required before referral to HES[5, 6, 12, 15]

- repeat measures
- enhanced case finding/referral services
- referral refinement.

Overall, the evidence suggests that GRFS consistently reduce the false positive referral rate and/or first HES visit discharge rate, can be safely delivered in community optometry, and provide comparable care to hospital-based glaucoma clinics. Virtual review of patient data by HES-based clinicians after examination in primary care settings may prevent further unnecessary appointments and act as a safety net to minimise false negatives from being discharged. The evidence for each scheme is reviewed in detail below.

2.1 Repeat measures services

Non-contact procedures to measure intraocular pressure (IOP) are commonplace in primary care practice and useful for case finding but are subject to inherent variability (e.g. over- and under-estimating values depending on corneal thickness), which may lead to unreliable and inconsistent readings, particularly when bordering referral thresholds[16]. Visual field (VF) tests are subjective by nature, meaning they may produce anomalous results that do not correspond to any underlying pathology[16].

Repeat measures services provide additional measurements of IOP and VF assessments after an eye examination to confirm the accuracy of suspicious findings before considering referral[16]. Evaluation of a repeat measures services based in South London showed that 76% of patients did not need referral following a locally agreed protocol[16].

These services are the most common commissioned glaucoma referral filtering services in England, Northern Ireland and Wales[5, 6]. The procedures involved do not typically require additional optometrist qualifications as these procedures are within the scope of core competencies[5,16].

In Scotland, the enhanced GOS contract enables supplementary and repeat investigations, including clinical parameters associated with glaucoma diagnosis. A study comparing glaucoma referrals before and after Scottish GOS contract reforms in 2006 found a modest yet statistically significant decrease in false-positive glaucoma referrals (from approx. 37% to 32%), and a substantial increase in true-positive referrals (from approx. 18% to 32%)[17]. Acceptable levels of agreement on referral decisions were found between optometrists and ophthalmologists (52-60%)[17]. A later, larger-scale study of these changes and the impact of introducing an electronic referral system in the Fife region found similar findings, in addition to faster referrals and reduced waiting times for HES appointments[18].

2.2 Enhanced case finding services

Enhanced case finding/referral services include additional investigations beyond IOP and VF testing, such as dilated stereoscopic optic disc examination, and are delivered by optometrists with suitable additional training in glaucoma[5, 6, 15]. These services aim to triage referrals from primary care optometry to reduce false-positive referrals to specialist glaucoma clinics. They may be based within community optometry or within HES[5, 6]. Within a community-based service to triage optometry referrals in South London, 71% of suspect glaucoma or ocular hypertension (OHT) cases identified for review were discharged following initial review, with 14% discharged after further review and only 11% referred to HES[16].

An evaluation of a Manchester enhanced case finding service in 2003 was shown to reduce false-positive referrals by 40%, similar to the rate of first visit discharge within the local HES prior to implementation[19]. A more recent evaluation of the updated service in 2018 showed that over 53% of optometrist referrals were discharged by the service, reducing the number of false positives referred onward to HES to 15%[20].

Furthermore, the Manchester service had a low false negative rate: only~11% required further follow-up, the true false-negative rate was 0.8% and there were no cases of missed pathology within the study sample[20]. Another evaluation of this service also showed that reducing the volume of referrals and false-positives could in turn reduce hospital waiting times and free up hospital appointments for those in need[21].

Evaluation of an enhanced case finding service in Carmarthenshire showed that 53% of referrals were prevented to HES, with a false-negative rate of 3-10% and no identified compromise of patient safety[22]. Of those referred, 83% were given a diagnosis of suspect glaucoma or glaucoma. There was good agreement between optometrist and HES-based measurements and high quality of decision making (sensitivity of correct diagnoses of 95% and specificity of 87%; positive and negative predictive value of 0.86 and 0.96 respectively), indicating a very safe service[22].

In a Huntingdon service, community referrals are triaged in HES by an optometrist to risk-stratify those requiring community-based review and those to be directed to the HES glaucoma clinic[23]. A study assessing the service's activity and quality showed that 35% of onward referrals were prevented[23]. Ophthalmological review of discharged cases showed a good level of agreement (70%) and, for those who were referred, a high level of examination quality (indicated by sensitivity, specificity and negative predictive value) for a range of diagnostic parameters[23]. A safety evaluation of a small sample within the Huntingdon service found a false negative rate of 15%, but none of these cases were found to have glaucoma or required treatment[24].

In a larger multi-site retrospective observational time-series study, which included the Manchester and Huntingdon services described above and others in Gloucester and Nottingham (the latter two being HES-based), the first visit discharge rate for optometrists providing case-finding services was ~14% compared to ~36% for optometrists who were not[25]. Although there was general good agreement with ophthalmologist colleagues regarding referral decision making, the authors suggested that the use of IOP results alone for referral had an adverse effect on the optometrists' ability to detect glaucomatous optic nerve features[25]. It was also suggested that optometrists with additional glaucoma qualifications may be better able to detect subtle optic nerve changes[6, 25].

2.3 Other glaucoma referral filtering models

Within Cambridge, a service utilising virtual ophthalmological review of referrals to HES found that approximately 47% were discharged at first assessment by participating optometrists, with a 91.5% overall concordance rate between optometrists and ophthalmologists[26]. Of patients who were discharged, only 2.8% were recalled for further assessment[26]. A variation of this service in Portsmouth involves HES-based virtual review and referral decision making based on clinical data collected by participating optometrists. This model enabled 89% of referrals to be discharged back to the community. Of those referred to HES the positive predictive value for glaucoma and OHT diagnosis was 0.78, compared to 0.37 in the traditional referral route[27].

More recently, a small pilot study of a similar virtual clinic service in Newham suggested that 61-78% of referrals to HES could be prevented depending on the clinical risk threshold set[28].

2.4 Referral refinement

Referral refinement services are those which include investigations sufficient for glaucoma diagnosis, including gonioscopy, and are delivered by optometrists with additional glaucoma qualifications (or the equivalent for non-optometrists). Although these services have been defined in the NICE Glaucoma diagnosis and management guidelines[15], there is limited evidence on the impact of actual referral refinement services due to very few services having been commissioned and a lack of published reviews. Based on the service specifications, many published studies of "referral refinement services" actually relate to enhanced case finding services.

3. Glaucoma shared care pathways in the community increase capacity

To help alleviate pressures on hospital-based glaucoma clinics and address growing demand for new and follow-up appointments, a range of shared care or co-management pathways have been commissioned in community optometry to monitor and/or manage low-risk glaucoma and OHT cases, supported by joint guidance on risk-based monitoring from the Royal College of Ophthalmologists and The College of Optometrists[5, 6, 46]. In England, these pathways are typically protocol-driven and HES-led, providing training and quality assurance through ophthalmologist oversight of optometrists with additional glaucoma qualifications[5, 6].

In a randomised controlled study comparing community optometry monitoring with hospital-based care in Bristol, it was determined that optometrists took measures of comparable quality (validity and reliability) to hospital glaucoma clinics[29,30]. At the two-year evaluation, no significant differences in clinical variables and patient outcomes were found between each setting[31].

In Peterborough, an observational study over two years found that community optometrist monitoring of low-risk, stable glaucoma patients was comparable to hospital care, with low levels of disagreement regarding clinical parameters when compared with later review by a consultant ophthalmologist[32]. At the four-year time point, over 60% of new patients were retained in the community pathway, with even lower rates of disagreement where optometrists had completed additional glaucoma qualifications, concluding that this pathway provides acceptable levels of care and can keep many patients out of hospital[33].

Community-based OHT monitoring pathways have also been shown to free up capacity within hospital glaucoma clinics, for example a community pathway based in Cambridgeshire retained over 87% of patients after the first attendance[34]. Following virtual review of monitoring data within HES, no additional patients were suspected as requiring referral to HES, which helped prevent unnecessary referrals over the study period[34].

More recently, a pathway in Manchester involving review of low-risk OHT and glaucoma patients within primary eye care has been evaluated in a mixed-method observational study. Over 93% of patients reviewed were able to be monitored within the community after first attendance[35]. Glaucoma specialist review of a random sample of patient records showed there was very good concordance in decision making with over 97% agreement in management plans and no false-negative cases identified over the study period[35]. In addition, there was a significant reduction in carbon emissions (approx. 66%) resulting from reduced travelling requirements, highlighting the environmental benefits of community-based pathways[35].

In recent times, new national glaucoma pathways have been rolled out in Scotland and Wales, however the evidence base on their impact is yet to be fully established. In a mixed methods service review, utilisation of glaucoma services in primary care in Wales resulted in significant shorter waiting times and lists for appointments compared to HES[47].

In summary, community-based shared care pathways are safe and effective, providing comparable care to hospital-based glaucoma clinics for patients with OHT, suspect glaucoma and stable glaucoma at low risk of vision loss. These services help to release HES capacity for high-risk patients and those in need of more complex care. Providing care in the community can help improve access to eye care and support sustainability initiatives to reduce the environmental impact of attending HES.

4. Improved access and high patient satisfaction

While the majority of GRFS and shared care pathway evaluations report on safety and effectiveness, there is also some data on patient perspectives of repeat measures and enhanced case finding/referral schemes. In general, there is broad support among stakeholders - including patients and commissioners - for locally commissioned optometric-led glaucoma services. In enhanced case finding/referral schemes, 99% of patients were satisfied with the optometrist examination, and the vast majority rated many professional aspects of care as "very good"[36,37]. In the Bristol glaucoma shared care pathway, patients were found to be significantly more satisfied with care provided in the community compared to HES, based on reduced waiting times and travel when attending appointments[29]. Similarly, the Peterborough shared care pathway reported that 96% of patients were satisfied with the care provided, citing the location choice and flexible appointment scheduling (evenings and weekends) as important benefits[32]. From patient satisfaction surveys in the Manchester shared care mixed-methods evaluation, 100% of patients reported overall satisfaction with the service, with 95% having confidence in their clinician, 100% being very or fairly satisfied with the location and most were very satisfied with the clinical environment[35].

A recent qualitative evaluation of community-based glaucoma care also found that access to care, choice of practice and reduced waiting times are important for patients. Some patients felt optometrists can spend more time discussing findings in primary care settings[38]. It also showed that many patients are happy to be seen by primary care optometrists when they felt their required care was low risk[38]. These results mirror the findings from HealthWatch England, which shows strong public support (over 85%) for expanding the range of services offered by community optometrists and the ability to deliver eye care closer to home[39].

5. Recommendations

To realise the benefits of community optometry-based GRFS and shared care pathways at scale, the following actions are required:

a. Fund repeat measures pathways for suspected cases of OHT and glaucoma:

Where measures of IOP and visual field results are equivocal following a sight test, undertaking appropriate repeat assessments, including Goldmann-type applanation tonometry wherever possible, can help avoid up to 76% suspect OHT or glaucoma referrals[16,40,41]. Such services significantly reduce unnecessary hospital referrals, with considerable cost savings to health services[16]. While such pathways are funded via specific GOS contract enhancements in Scotland[42], Wales (including in domiciliary settings)[43] and Northern Ireland[44] (NI), this activity is beyond that which is provided through both private and GOS sight tests in England. Access to any form of repeat measures services in England is highly variable.

Therefore, every primary eye care practice in England should be enabled to provide at least a commissioned glaucoma repeat measures service for IOP and visual fields testing with a consistent service specification, including regular clinical audit and funding for Goldmann applanation tonometry (GAT) consumables, equipment procurement where required and infection control procedures. Accreditation is not necessary as all procedures are part of optometrists' core competencies, however local systems may wish to agree and monitor parameters for assuring calibration logs and infection control for GAT and visual field testing. ICBs should review their current service provision and act to expand or establish contracts to achieve 100% geographic coverage.

b. **Targeted commissioning of local glaucoma enhanced case-finding and shared care pathways:** Enhanced case-finding can prevent unnecessary referral to HES (reducing false-positives) and improve the first visit discharge rate (increasing true positives) by providing additional glaucoma specific investigations beyond repeat measures schemes. These services fill a critical gap between routine sight tests and hospital glaucoma clinics. Furthermore, optometry-led community OHT and glaucoma shared care and monitoring pathways enable better use of health service resources by utilising the capabilities and capacity within the primary care optometrist workforce, freeing up capacity in HES for clinicians to provide more care to glaucoma patients with complex needs and higher risk of vision loss[45, 46, 47].

   In recent years, there has been a substantial increase in the proportion of optometrists with higher qualifications in glaucoma based in primary care, demonstrating the workforce's interest in upskilling and expanding capacity to support existing glaucoma services[51]. Evidence shows that optometrists with additional glaucoma qualifications can provide safe and effective care for referral filtering and management (monitoring and/or treatment) of OHT, suspect glaucoma and stable low-risk glaucoma cases, comparable to hospital based clinicians[29-33,35]. More recently, glaucoma enhanced case-finding services and shared care pathways have been commissioned at national level in Northern Ireland (OHT only)[48], Scotland[49] and Wales[50], but access in England is inconsistent. Thus, every citizen in England should have access to a commissioned enhanced case finding/referral refinement service and shared care monitoring and management pathways in primary eye care, aligned with the Glauc-Strat-Fast risk stratification guidance[46]. Access to shared care community-based management pathways should be extended to patients with low-risk glaucoma in Northern Ireland. Strategic, locally agreed service planning is required to identify appropriate locations for these services based on local primary eye care workforce and estates, patient accessibility and population need, to deliver long-term, sustainable care[51].

c. **Improved clinical governance and collaboration:** Enhanced case-finding/referral refinement services and shared care management pathways should be fully integrated into the broader healthcare system. Suitable clinical governance structures should include outcome monitoring (e.g. clinical audit, patient feedback and referral patterns), quality assurance and patient safety audits to maintain high standards of care, improve service quality and address any issues promptly[23-27,33-35]. Evidence shows that services with multidisciplinary shared learning opportunities (e.g. referral feedback, case discussion, continuing professional development) improve primary care optometrists' quality of referrals, decision making and confidence to manage more complex cases[25,33,36,37]. Thus, commissioners should include arrangements for facilitating multidisciplinary learning and collaboration to enable better communication, access to training opportunities, relationship building, review of local protocols and implementation of national guidelines.

d. **Investment in IT systems:** IT integration is crucial, with a need for sustainable investment in digital infrastructure and whole system planning to enable optometrists to access shared patient records and electronic referral systems. Access to clinical data, effective image sharing between primary and secondary care, and bidirectional communication are necessary to facilitate decision making, feedback and learning[36, 37,,52, 53]. This includes access to advice and guidance systems to support decision making and facilitate co-management, to further reduce onward referrals.

e. **Adequate funding for entire pathways and training:** All commissioned GRFS and shared care pathway contracts must provide adequate and sustainable funding and resources to cover full service costs. Funding is also needed to support training to manage less common and/or more complex cases, particularly for clinical placements and clinical experience opportunities. This would support optometrists who wish to gain additional glaucoma qualifications or independent prescribing so they can deliver enhanced case-finding/referral services or shared care pathways[15,46,51].

f. **Access to NHS-funded prescriptions for independent prescribers:** Where independent prescribing optometrists with additional glaucoma qualifications are working within shared care pathways, commissioners should maximise their ability to provide therapeutic glaucoma treatment by permitting them access to NHS prescription stationery or electronic prescribing codes. While this is enabled in Scotland and Wales following optometrist registration with the local Health Board, access to NHS prescribing in England and NI is inconsistent and dependent on local commissioning arrangements. Enabling access to NHS-funded medicines ensures equitable access to treatment and avoids unnecessary referrals to HES or GPs simply to obtain a prescription for glaucoma medicines[51]. This is particularly pertinent for people in deprived areas or within an ethnic minority group who are less likely to be able to afford private treatment but are at higher risk of developing glaucoma and vision loss[54,55,56,57].

6. CONCLUSIONS

UK nations have a significant opportunity to help manage the increasing number of glaucoma cases and limited HES capacity[58]. This can be achieved by supporting all optometrists to use their core skills to prevent referral initiation, and utilising the capacity afforded by optometrists with higher qualifications in primary care to further prevent onward referral of suspected cases to HES and manage low-risk glaucoma cases in the community. While such services are being rolled out in Wales and Scotland, full coverage is still to be achieved (at the time of writing) and full shared care services are yet to be commissioned in Northern Ireland. England has variable and limited availability of both GRFS and shared care pathways. Therefore, there are still opportunities to improve HES capacity and patient outcomes.

It is evident that GRFS and community shared care pathways are safe and effective, significantly reducing the burden on HES, with clinical quality comparable to hospital-based clinicians. Given the current ophthalmologist workforce shortages and HES capacity issues, these pathways release HES capacity to focus on patients in greatest need, reduce waiting times and help prevent avoidable sight loss due to delays in accessing glaucoma treatment. Patients benefit from a wider choice of locations for services, reduced travel time and distance, and have a high level of satisfaction with the care provided. This aligns with broader environmental sustainability needs and broad national health systems' goals of moving care into the community and improving integration between primary and secondary care. Local planning with a whole system view to selectively commission community enhanced case-finding/referral services and shared care management pathways will enable a more resilient national eye care system fit to meet the growing needs of each nation's aging population.

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