THE ROYAL COLLEGE OF OPHTHALMOLOGISTS

Improving eye health and reducing sight loss – A 'Call to Action' Response

The Royal of Ophthalmologists (RCOphth) is the professional body for eye doctors, who are medically qualified and have undergone or are undergoing specialist training in the treatment and management of eye disease (including surgery*). As an independent charity, we pride ourselves on providing impartial and clinically based evidence, putting patient care and safety at the heart of everything we do. Ophthalmologists are consequently at the forefront of eye health services because of their extensive training and experience.

The RCOphth recognises the increasing demand for eye care and the need to work in multidisciplinary teams with other medical and non-medical professionals to deliver high quality care that is cost effective. This response makes three assumptions throughout:

1. NHS England wishes to tackle health inequalities between different patient groups (eg people with dementia, homeless people and travellers, people with learning disability) and patients from all socio-economic backgrounds.
2. Patients should be able to move seamlessly from primary, secondary and third sector care and back again without compromising care.
3. Access to eye care needs to be more equitable; this must include patients being followed-up for acute and chronic eye conditions as well as newly referred patients.

This Call to Action (CTA) presents a unique opportunity to develop commissioning policies which can improve patient care by developing patient referral pathways and management protocols that are safe and appropriate for patients whether they are looked after in the community or in hospital. These need to be evidence based and fully costed.

Recommendation: CTA should take into account the recommendations of the Dalton review, launched by the Secretary of State for Health in February 2014 (1). Although this will primarily focus on hospitals, we recommend that both CTA and Dalton, are reviewed together so that a coherent management plan across the eye care sector can be implemented.

Recommendation: RCOphth encourage NHS England to support the UK's Vision Strategy (2) which has broadly similar goals.

Call to Action Questions

1. How can we secure the best value for the financial investment that the NHS makes in eye health services?

The RCOphth recognises that best value is achieved when patients who require assessment or treatment are seen in the most appropriate location by health care professionals who can deal with them effectively and efficiently, whether in the community or in the hospital and that any examination, testing and treatments are commensurate with their needs. Therefore it is vital to ensure that only appropriately trained, competent and experienced personnel look after the patients in any setting.

This needs a careful assessment of training needs, construction of new ways of working which will cut across the primary/secondary care interface, and involve the development of safe patient pathways with improved communication and IT services. The true cost of services will need careful financial auditing for cost-effectiveness. The entire team needs to work together to prevent duplication and maximise resources and to ensure that the patient is at the centre of all care provision.

Recommendation: The RCOphth recommends a consultant ophthalmologist-led service following the principles of the Academy of Medical Royal College's Guidance for Taking Responsibility: Accountable Clinicians and Informed Patients (3).

Increasing capacity

The hospital eye service clearly already works efficiently. In England the number of eye out patient attendances increased by a remarkable 30% from 5 million to 6.5 million in a 5 year period (2008 -2012) due to the introduction of successful new treatments and services. This has been absorbed with comparatively small amounts of funding and small increases in personnel because of the early and rapid adoption of new working practices. This has involved developing and implementing new guidelines and training of ophthalmic nurses, optometrists, orthoptists and technicians to work as part of the medical team. This model of extended teamwork using the whole eye health community can – and should – be replicated into care beyond the hospital walls. The appropriate training of non-medical personnel for extended roles in the community following agreed ophthalmology led pathways, networks and shared care schemes will increase the capacity of eye health care. However, this can only occur when an essential communication infrastructure exists to permit free flow of relevant clinical information to reduce duplication of services and to ensure the sharing of appropriate data for efficient care.

This would assist in reducing the number of unnecessary referrals (false positive referrals) to hospital and permit discharge of low risk patients into the community. Both of these elements are key to increasing capacity in hospital eye services, allowing them to focus on the true positive referrals i.e. patients who need treatment. It is important that services are planned according to local needs and any increase in capacity is a long term rather than a short term objective.

The expansion of roles would permit an increase in the capacity of care – both space and personnel – but there is as yet no evidence regarding the cost and efficacy (hence value) of transferring care from hospital to community, even where such models exist eg Wales and

Scotland (see answer to question 12e). The care received in hospital eye service represents the expected standard to be achieved. Overall there are more patients seen in hospitals per unit of time per clinician and more defining clinical decisions made, with fewer unnecessary reviews, due the availability of specialist knowledge. These high volume services utilize personnel and expensive equipment efficiently and should be expanded where feasible.

To create these services:

- The training needs of non-medical personnel will need to be addressed (including funding), see Glossary for information on professions involved in the eye care process.
- Regular full audit of outcomes to ensure quality, safety and value.
- Appropriate IT and communication need to be available in the community.

Recommendation: To meet growing demand increasing and broadening the capacity of consultant ophthalmologist-led eye health care is necessary – this needs to be carefully constructed from the perspectives of training of personnel, cost and patient involvement, and should be evidence based.

Accurate costing of services

Tariffs for new and follow-up outpatient visits, necessary tests and treatments should reflect true cost. Commissioners should not enforce arbitrary new to follow-up ratios as this can lead to the inappropriate discharge of patients (4).

With services now offered to Any Qualified Providers, it is clear that under cutting nationally set tariffs or awarding large contracts may have considerable the impact on local hospitals, which are still required for complex care and may result in damage to this infrastructure which would be counterproductive.

Financial incentives for optometrists to refer patients to hospital for certain conditions, such as cataract, should cease as this provides a perverse incentive to refer inappropriate patients for surgery.

Recommendation: Services should be costed properly and accurately in both primary and secondary care with tariffs that reflect these costs.

Data collection to provide evidence to inform decisions

There is insufficient information about the overall capacity needs of ophthalmic services in the UK. Patients are waiting for increasingly long periods of time and there are delays and postponements of return appointments and treatments. It is impossible to arrange appropriate services without this information

The outcomes of consultations and treatments are also unknown as no data are collected about these activities. HQIP (Healthcare Quality Improvement Partnership) has funded the RCOphth to run a national audit project looking at the outcomes of cataract surgery and the feasibility to also audit outcomes of glaucoma care, retinal detachment surgery and care of patients treated for wet age-related macular degeneration. This will provide vital information that will help to develop services based on patient needs and the optimum use of services.

This type of data collection should be inbuilt to all clinical systems and made mandatory and subject to Care Quality Commission (CQC) inspection.

One of the main outcomes this CTA should be prevention of sight loss. The registration and certification of patients with sight loss (sight impaired or severely sight impaired) would therefore be a highly useful measure of success or failure. However, for any reduction in the rate of certification to truly reflect an improvement in the service, the collection of data must be comprehensive and accurate. The data is currently used to inform the Public Health Indicator Outcome Framework for Health and Premature Mortality for preventable sight loss http://www.phoutcomes.info/. NHS E or Public Health England (PHE) should consider funding the collection of Certificate of Vision Impairment (CVI) data which at present is independently funded (by RNIB). Proper, improved funding may allow electronic certification and registration, reducing the burden of data collection and improve uptake.

Recommendation: Accurate data should be collected regarding the outcomes of patient episodes and pathways to ensure optimum use of resources. This should be supported by mainstream funding.

The use of routine sight tests

Vision testing is recommended and is an important method of identifying some eye conditions. A consistent ophthalmic examination is important and needs to be agreed on to maximise its role and prevent waste.Therefore, the GOS sight test should be standardised with regard to content, frequency, equipment and eligibility. The basic sight test needs to be defined – with clear evidence for the use of each test. If standards of testing and assessment are set, then referral guidelines and follow up of patients by optometrists will be more accessible.

Equipment should be compatible with that of the hospital service in order to provide similar results that can be directly compared with each other. Although routine sight tests have been funded by the Department of Health through the GOS budget for many years, there are no performance indicators or standards and there is no routine audit of costs and effectiveness. Given the standards which all other NHS services must meet, this should be addressed to ensure good value.

The current GOS sight test fee, despite its recent uplift, still does not cover the actual cost of the NHS sight test. This affects the financial viability of the optometrist and the sale of glasses or contact lenses often subsidises the test. This creates a significant conflict of interest with optometrists under significant pressure to sell as many glasses as possible – even resulting in the adoption of 'conversion rates' by some companies.

Therefore, there is a concern that the uptake of GOS sight tests may be less universal because of public wariness that they will be pushed to buy spectacles or pay for certain tests. Separating the commercial aspects of optometry with sight testing to detect eye disease should be considered. In addition, performing this test in other settings eg GP practices or even in supermarkets may improve access especially in the poorer parts of the community (5, 6).

There should be coordination and cooperation between primary and secondary care so that sight tests can be appropriately done in more convenient locations. Patients who are in the

secondary care system who require tests that can be done in the community should have these done there eg field of vison testing is commonly at breaking point in the hospital and this could be performed in the community. This requires secure IT networking to share relevant data. Data protection and patient confidentiality must be kept so that the clinical information transmitted to the community optometrists will be kept secure and personal.

A register of tests performed should be kept as part of a patient's health record by the GP. Likewise, optometrists who look after a patient's eye health should have access to the relevant GP and hospital records (a model being looked at in Scotland). Repeat testing by different optometrists and across the primary /secondary care interface needs to be avoided. The timing and frequency of tests should also be optimised.

Recommendation: The current GOS scheme should be reviewed. The sight test should be standardised, avoiding need for duplication. Separation of the function of early detection of eye disease using the sight test from sales of glasses or contact lenses should be considered.

Commissioning across public health primary, secondary and tertiary care and social services

The fragmentation of services promotes a 'silo' mentality for funding care. This leads to short-termism as financial decisions only affect the immediate to medium term and do not have apparent or relevant implications for the future. By commissioning across the entire health and social care pathway, the patient remains at the centre of the process. For example, a drug deemed too expensive in a health budget will be cost-effective when the social cost of losing sight on independence and occupation is taken into account. Full integration of funding would help better decision making.

Recommendation: Close coordination of eye care commissioning should occur across public health, primary, secondary and tertiary care and social services.

New ways of working

There are several ways of streamlining assessment and management of patients. Virtual clinics for glaucoma and AMD services have increased the efficiency of clinic time. These utilize technology and non-medical eye health care professionals to assess patients with review of the findings by a consultant ophthalmologist who effects a management plan.

Similarly the diabetic eye screening programme, which makes use of photographic screening as an objective way of assessing the eye, could be improved with the use of additional equipment such as optical coherence tomography (OCT) and wide-field imaging, to increase the specificity and sensitivity of referrals and thus reduce unnecessary false positive referrals to hospital.

Recommendation: Innovative ways of working and information sharing should be explored.

Better use of current resource

Cost savings can be achieved in eye care if commissioners and eye health professionals prescribe generic medications, where clinically appropriate eg prescribing generic latanoprost when the patent expired in 2012.

Another area of large potential saving is to consider the use of non-licensed medication where there is evidence of its safety and efficacy. In the treatment of wet age-related macular degeneration (AMD), NHS E could collaborate with commissioners and NICE to support using bevacizumab (Avastin) in the treatment of wet AMD. The expected savings can be used to fund services and the training of optometrists and allied health professionals to increase much needed capacity.

In addition, by agreeing specific protocols, then savings can be made – eg - NICE CMG44 recommends that referrals for suspected glaucoma should be made to a glaucoma service only when repeat measures of intraocular pressure have taken place.

In Bexley Care Trust, community optometrists improved the quality of hospital referrals by repeating IOPs with a specific machine (the contact applanation tonometer) on up to two occasions and/or repeating visual fields on a separate occasion. By using the repeat measures scheme, there was a reduction of 76% in being referred with substantial cost benefits while onward referral for refinement by an accredited optometrist was essentially cost neutral (7). This scheme reported overall savings of up to 62% against the hospital eye service tariff and a full year saving of £32,500; equating to £15,000 per 100,000 population (8). Further savings may be made by insisting that IOPs are measured by Goldmann applanation tonometry for all sight tests and that visual fields – where indicated - are all done by the standards Humphrey visual field analyser. This would prevent the need for referral refinement, preventing a second visit for the patient. Investment in training will be required.

Recommendation: Upskilling and continuous professional development must be an integral aspect of providing a good value service.

Information technology

The lack of IT is a major barrier to improving the efficiency and quality of care. Wherever care takes place, it would be ideal to have an electronic referral system, electronic records and compatibility throughout the NHS. Fast, seamless, safe and secure systems available to all professionals involved in patient care is needed.

Recommendation: Improve the quality and methods of information sharing between providers of eye care services to improve efficiency and reduce duplication.

2. How can we encourage a more preventative approach to eye disease to reduce the burden of blindness and vision impairment?

The UK has a high level public health strategy for eye health: The UK Vision Strategy (1). NHS England together with DH and PHE should visibly support and promote its implementation and progress towards achieving its objectives for preventing sight loss and improving eye population health.

There is epidemiological evidence regarding the association between sight impairing conditions and systemic diseases responsible for premature mortality and morbidity so any generic public health interventions (eg for smoking cessation, diet, obesity, physical activity), designed to modify risk of these will also have a beneficial impact on eye health and prevention of sight loss. Raising general awareness of these associations with eye health among health and social care staff, and all community health care workers, is important and necessary for aligning key messages in health education and assessment of high risk and vulnerable groups in the population.

There are several ophthalmic screening programmes in place which have been approved by the National Screening Committee (NSC) of PHE yet not all are universally commissioned eg - screening for visual impairment in children, between the ages of 4 and 5 years, offered by an orthoptic-led service, is recommended http://www.screening.nhs.uk/vision-child, but this has not been implemented by several local authorities.

Further screening is unlikely to be the optimum mechanism of achieving early detection; and any further programmes would need to fulfil screening criteria. Input from the NSC would be essential.

Recommendation: NSC approved screening programmes should be considered high priority for commissioners. Further screening programmes need full evaluation before considering implementation

With an estimated 40% of those with poor vision being due to lack of spectacle wear (uncorrected refractive error), particularly in those 75 years and over, accessibility to eye care needs to be improved, especially in poorer areas of social deprivation. Optometry premises are not often situated within such community settings– but in town centres on the High Street (5, 6). There should be a concerted policy to place optometry premises in all necessary locations to help improve access**.** In addition, as previously suggested, using alternative premises like GP practises for sight and eye tests and considering separation of the commercial aspect of optometry from that of health provision will clarify the role to patients and prevent the conflict of interest that this causes.

Recommendation: Community optometry premises should be accessible and available in areas of deprivation. Consideration should be given to separating the commercial aspect of optometry from eye health provision.

The RCOphth agrees that while more could be done to improve early detection of eye disease we caution that eye disease itself usually cannot be prevented. Instead if it is picked up earlier, it is then treated for longer. Inevitably, improving detection will lead to a higher demand from people with eye health problems. Therefore more, and not less, capacity will be required. In addition the morbidity and resource associated with false positive detection needs to be included in early detection programmes.

Recommendation: Increase capacity in eye care services to deal with earlier detection of eye diseases

3. How do we encourage individuals to develop personal responsibility for their eye health and sight?

Public/Patient education has to be the key. The known associations of smoking, poor diet and obesity with eye diseases are all generally well understood but the effect of these on the visual system is not well recognised and new methods of delivering health improvement messages are worth considering (eg the recent campaign by the macular society that revealed children were unaware that smoking increased the risks of blindness). Education should be aimed at the young if at all possible. This includes promoting use of safety glasses and eye protection (appropriate sunglasses). Schools should consider health campaigns on an annual basis. Reminders that a family history of eye disease (such as glaucoma, amblyopia) and having concurrent disease such as diabetes- are risk factors is also useful.

Modern technology with the use of social media eg Facebook/ twitter provides NHS E with a readily available method of raising public awareness. This may be a cheaper and more effective way of reaching the younger population rather than using older methods like television, radio or newspaper campaigns.

Patient groups and charitable organisations prove invaluable and highlight the need to improve patients' awareness of the symptoms and urgency of AMD.

Delayed appointments has been recognised as a major patient safety issue - identified in an analysis of patient safety incidents in England and Wales. Treating AMD patients on time became more challenging in 2013 after NICE approved ranibizumab to treat diabetic macular oedema and retinal vein occlusion which increased the demand for intravitreal injections (9). Informing patients of their treatment regime and the importance of the appointment schedule and giving them responsibility to check up on appointments that are delayed may be one method of reducing this problem.

Involving patients with glaucoma, or any chronic eye disease, in their own care plan is likely to heighten their understanding of the condition, reduce stress and uncertainty and improve adherence to medical treatment. Improved compliance with medication has been demonstrated to be cost effective and proved invaluable in improving patient understanding of sight loss. It has also helped to improve the access of patients with sight loss to available benefits and in ensuring that patients with sight loss are appropriately certified and registered. RCOphth strongly encourages that an Eye Clinic Liaison Officer (ECLO) is appointed in every eye department (10).

Recommendation: PHE to instigate novel campaigns on the above public health issues. CCGs to include effective patient/information training eg on compliance and commissioning specifications. ECLOs should be available in every eye department.

4. How can we increase an understanding of eye health amongst health and social care practitioners in the wider professional network, particularly amongst those who are working with groups at higher risk of sight loss?

Education and training for all members of the health and social care workforce is essential to provide sufficient knowledge of ophthalmic conditions and to highlight who is at particular risk. Online information and courses can also be helpful to improve knowledge of the wider workforce. Consideration of more placements of allied professionals in eye departments can be considered to give them a basic understanding of eye conditions. This will need to be funded and incorporated into any proposed new system of care.

5. How can we ensure that all relevant NHS services identify and address potential eye health problems for patients with long term conditions where eye health problems are a known possible outcome?

Education and training of the workforce is vital to achieve this objective, particularly those working with people with high risk conditions, such as diabetics, and those on drugs recognised to be toxic to the visual system.

There is a screening programme commissioned by NHS England for diabetics. Healthcare professionals involved in diabetic care should encourage people with diabetes to attend for these annual retinal screening tests to ensure that sight threatening retinopathy is picked up early as this may respond to laser or medical treatment.

Initiatives such as [The Community Eye Care Pathway for Adults & Young People with Learning Disabilities](#) should be promoted to those working with young people with learning disability.

Commissioners, community optometrists and GPs should work with hospitals to improve understanding of rapid referral pathways and to tackle issues that can cause delays. Services should allow optometrists to refer patients directly to AMD clinics without going through a GP for example.

Local Eye Health Networks (LEHNs) should have fully representative membership with clarity around the roles of all members and partners to ensure that long term conditions are fully addressed. There should be a lead GP member with known responsibility for eye health in each LEHN, as well as representation from all health professionals involved in eye care (ophthalmologists, orthoptists, ophthalmic nurses) and the third sector. LEHNs and Directors of Public Health need to liaise and identify a public health representative for each LEHN to ensure a good evidence base for decisions.

6.   How do we develop an approach to commissioning that makes the best use of the skill mix that is available in hospital and community resources?

Knowing the eye care needs of the local population is the first step and a joint needs assessment done by local health and wellbeing boards can help this. Once the demand is known, input from local patients groups, ophthalmologists, optometrists, orthoptists and GPs

should be sought as to how, who and where patients can be best cared for. Only by doing this will the commissioning process have taken in to account everyone's views, with agreement as to the appropriate skill mix for safe and effective delivery of eye care.

Ophthalmologists working in the Hospital Eye Service have already embraced working in multi-disciplinary teams to improve patient access without compromise in quality of care (11). Care whether in the community or in hospital should be led by a consultant ophthalmologist because of their high level of knowledge, training and expertise (3).

The commissioning process should also include investment in developing leadership roles in order to build up the multidisciplinary team which will make best use of the skills mix as well as in developing the appropriate clinical pathways, training and governance around the delivery of high quality and safe eye care.

Commissioners should insist on outcomes based metrics to audit the quality and safety of a service (12) as well cost. In 2013, RCOphth and the College of Optometrists collaborated on a document on commissioning better primary/community eye care (13).

Recommendation: To make best use of skills, involve all the relevant health care professionals and involve patient groups in designing the commissioned service based on local needs. There should also be investment in leadership roles. National toolkits to assist the process, which provide evidence based information and guidance, but allow for local flexibility, should be drawn up by NHS England to reduce unnecessary duplication of effort.

7. Can we develop more widely the integrated role of eye health professionals in primary care in the identification and management of chronic or acute disease?

The short answer is "Yes" especially for the identification of eye disease. However, with regard to disease management (although already happening in some areas), there is no evidence that shared care is cheaper - an important fact given the lack of any increased funding. Any improvements in disease identification are likely to lead to increased need to treat. The professionals who currently deliver eye health services include ophthalmologists, general practitioners, optometrists, community ophthalmologists, orthoptists, ophthalmic nurses, opticians, ophthalmic medical practitioners, regional and national vision charities, patient support groups, social workers and carers and a host of individuals with special skills involved in the care of the visually impaired and blind people eg ECLOs (see glossary of terms).There are significant cost (and time) implications in training enough GPs, optometrists and allied health professionals to do the work and for appropriate equipment and IT to be available. Even supposedly 'easy' conditions such as red eye are only easy to manage once the diagnosis has been made and this skill (making a diagnosis) is not something which optometrists are currently generally trained for. Nevertheless, it is possible to identify low risk patients eg ocular hypertensives who might be suitable for integrated care dependent on adequate pathway development and training. The College of Optometrists has developed a suite of higher qualifications suite to demonstrate some such competencies. This should be supplemented with local training and assessment.

Consideration should be given to training of primary care eye health professionals in the hospital eye service where they will be supervised and gain experience in a wide range of eye conditions. Such placements should be made more widely available and repeated on an agreed interval to maintain skills and competencies.

8. What can we do to relieve pressures in ophthalmology departments because of difficulties in discharging patients back into the community?

Improving communication and access to shared clinical data are essential for safe discharge. Patients who are stable or at low risk of visual loss may be suitable for discharge into the community if appropriate protocols and guidelines are drawn up and agreed; indeed this is what was happening in many areas even before the NICE guidance on glaucoma (14) was issued. This will be facilitated if shared care schemes are audited against NICE standards and quality and attendance rates in the community are comparable to that of the hospital eye service. A recent study (15) reported a higher DNA rate amongst patients attending community optometrists for OHT monitoring than for hospital appointments. It would be important to consider the cost of "decentralising" patient care into the community as this should ideally not be more expensive to do.

In order to track patients through pathways to ensure they are treated at the right times and do not drop off the pathway (lost or delayed follow-up), any glaucoma service should establish a register of patients with and at risk of glaucoma. A glaucoma register is a failsafe record of all patients with COAG, suspected COAG and ocular hypertension (OHT). Registers need to be **accessible** (eg via an N3 network or other secure link), **inclusive** (of all participating providers) and **confidential** (overseen by a failsafe officer as is the case in the diabetic retinopathy screening programme). This type of system could be extended to cover patients who are discharged with stable eye conditions (16).

Training
The transfer of care to non-medical professionals and into the community has training implications if this is to be a safe and effective policy. There are a number of accredited courses available and continuing learning and development needs must be met. Based on the Scottish model the costs of training an optometry community workforce and maintaining future professional development of this workforce is estimated to be £12-15 million per year (17). The logistics of training sufficient optometrists and allied health professionals for the whole of the UK should be considered as well as the impact of large divergence of funds from the local hospital eye services

With the correct training and accreditation, enhanced services by allied health professionals, nurses and optometrists can be offered both in the hospital service and community. Any shared care scheme collaboration between providers, clinicians and commissioners should take precedence over a perceived need to induce competition between providers.

Research on quality, safety and outcome is essential to permit confident discharge of patients into the community.

The production of an annual glaucoma report as a collaborative initiative between commissioners, providers and other stakeholders (eg organisations representing patients with visual disability) is one way of ensuring that there is an effective and safe population-based framework for the detection and management of glaucoma in each locality. This approach is being used in Buckinghamshire where four projects contribute to the annual glaucoma report (16).

Successful discharge will be dependent on adequate and appropriate training of the eye health professionals in the community. Relationships and close working practices will facilitate good communication which will benefit patient care and working in both the community and the Hospital service improves training, exposure and feedback, all of which reduce the risk and stress of working in isolation in the community.

Nurses performing domiciliary/ home visits to help instil drops eg for glaucoma are an invaluable resource in assisting patients at home who may otherwise struggle to comply with the treatment prescribed.

9. How can we appropriately increase access and uptake of timely routine sight tests for the general population, including for people at higher risk?

Increased awareness as to the importance of ocular health and having eye tests can be achieved through education and the media. One barrier to access may be the location of most optometry premises, which are on the high street and not in deprived areas (3, 4). Therefore equitable access to sight tests is an issue for deprived portions of the population. It essential that if access to eye health care is to be improved then community optometry premises must be accessible. This may involve setting up a new type of community optometry with no commercial arm in order to improve uptake. Where this is not possible, the use of mobile units and other premises should be considered.

Recommendation: The location of sight testing premises should be reviewed in order to improve uptake. Mobile units can be used to improve access.

The population with significant medical and mental health problems can benefit from home visits. This more vulnerable group could quite conceivably benefit more from optometry services based in hospitals, where there is more support and indeed if they are frequent users, more familiar to them. Eye tests would be timed with hospital appointments for their convenience.

There are difficulties in carrying out sight examinations in certain high risk groups of people eg those in special schools or those in nursing homes. Increased awareness of the needs of such individuals should be embedded in training of staff in these environments and domiciliary testing may be an efficient mechanism.

The question raises the issue of 'timely' 'routine' sight testing. This is important because 'routine sight tests' of whole populations represents a screening programme in all but name, with little or no evidence for the tests performed, the frequency of testing and the financial cost involved.

Recent key research, indicating that the introduction of universal free sight tests in Scotland in 2006, has widened eye health inequalities rather than reducing them (18) is relevant.

In order to minimise the risk for harm and reduce the financial costs to the NHS associated with unnecessary, inefficient or ineffective screening, it is necessary to have the opinion of the NSC and PHE on the value of routine sight tests for the general population.

As most of the population is registered with a GP, making attendance for sight testing a Quality and Outcomes Framework (QOF) may be helpful to encourage the public to access sight tests.

10. How can we improve timely access to eye health treatments and sight loss services for vulnerable or seldom heard groups?

Promoting equality of access to services: The vulnerable, the seldom heard and people with learning disabilities have the same rights of access to NHS ophthalmic care services as any other people. There are however reports of adults who have congenital visual impairment identified in their 50s and 60s. Many adults with learning disabilities have never had eye tests. Family carers and supporters may be unaware of the incidence of visual impairment and the importance of regular examinations. Whilst there is an increase in people with learning disabilities having regular eye tests recent work found that only 52% had had their eyes tested in the last year (19).

The elderly, those with mental illness and people with significant medical conditions and poor mobility are also at higher risk of not accessing care. Not infrequently they live in care homes and may benefit from domiciliary visits.

Recommendation: Carers and relatives as well as other health professionals like GPs, community nurses and social workers are more likely to come into contact with this group. Raising their awareness and education to help them recognise the effects of sight loss can prompt increased referral to eye services.

Certification and registration as being sight impaired or severely sight impaired is as important for people with learning disabilities, but there is concern that people with learning disabilities and sight impairment are not being certified. It is important that ophthalmologists explain the certification process, and raise awareness that people do not need to be registered to receive help from local specialist services for blind and partially sighted people.

In general, improving access to treatments and sight loss services can be achieved only if the there is sufficient capacity for the needs of the population. It would be helpful as well for the funding stream from CCGs to be quickly available when new treatments are deemed cost effective by NICE.

11. How do we best involve service users and their carers in the development, design and delivery of NHS services for eye health?

Service users and carers involvement is critical. This can be achieved through public education and media but also quite simply at each contact eg at an eye test, pharmacy, GP or hospital visit, they could be approached to be involved in patient groups, charitable organisations and local eye health networks.

Information should be given in a form easy to understand in layman's terms. Their contribution should be acknowledged and valued.

The Lay Advisory Group of the RCOphth has submitted a separate independent response on this matter.

12. In stimulating debate about the potential for transferring more elements of eye care from hospitals to the community we want your views on:

a)   What is the evidence base to support the suggestion that providing more eye care in the community will prevent eye disease and reduce unnecessary expenditure elsewhere in the health and social care system, and how do we ensure the services are safely delivered?

There is no evidence to support this premise. Undoubtedly, more could be done to improve early detection of eye disease but we caution that **eye disease usually cannot be prevented**. Instead, diseases that require referral and management are identified earlier. Therefore more community eye care may improve the capacity to provide eye care which is welcome, but it is likely to increase expenditure due to demands on services in secondary care which treat and manage the eye conditions that have been identified.

To ensure that standards are delivered, adequate governance of such services needs to be employed, including appropriate inspections via CQC (Care Quality Commission) to all health care providers

b) What are the workforce implications (development / re-structuring / training) to ensure safe and effective services for patients, and how would these be delivered?

GPs and optometrists do have skills in detecting and managing eye conditions but their training and experience in diagnosing and managing eye pathology is quite different to that of ophthalmologists.

Many have a low exposure to eye pathology as many eye conditions are relatively rare in relation to GP list sizes or the catchment area of an optometric practice. For example the incidence of new 'wet' macular degeneration is about 26,000 per year in a population of 60 million, which means a GP with a list size of 3,000 would only expect to see one patient per year (20).

Education and training is required in order to improve skills and there should be better collaboration across the primary/secondary care divide in order to improve ophthalmic care for patients.

c) What are the IT requirements to support more community care?

The lack of IT is a major barrier to improving the efficiency and quality of care. Wherever care takes place, it will be necessary to have an electronic referral system, electronic records and compatibility throughout the NHS. Fast, seamless, safe and secure systems available to all

professionals involved in patient care are needed. Optometrists struggle to get NHS IT connections that would enable them to share patients' test results and communicate with consultant ophthalmologists. If this barrier could be overcome, more remote "virtual" consultations could take place saving time, travel and cost. Optometric practices are not part of the NHS communication network, and all need to be linked with the hospital and general medical practice IT systems. E referrals and communication should be facilitated via this route

Good communication between diabetic retinopathy screening programmes and the hospital diabetic retinopathy services to which they refer is essential. This is frequently the weakest link in the services for patients with diabetic retinopathy. Screening programmes need to be notified regularly of the status of patients attending hospital diabetic retinopathy clinics so that the fail-safe database can be kept up to date. Hospital diabetic retinopathy clinics need to have access to retinal screening images in order to determine the optimal frequency of follow-up.

Recommendation: The importance of improving IT and data sharing is probably the requirement that will have the most impact on efficient delivery of quality patient services.

d)   What are the information requirements to support more community care?

Data collection must be well thought out and undertaken accurately so that when data are analysed a true and representative impression of practice is formed. The results must be carefully interpreted and any changes to practice implemented with full agreement of those involved. Re-audit at a later time completes the audit cycle and should affirm adjustments to practice implemented in the earlier cycle(s).

E-referral
Commissioners may wish to identify whether their locality has the potential for the implementation of e-referrals and virtual clinics between primary and secondary eye care. E-referral has been piloted within ophthalmology as a means to reduce unnecessary hospital referrals. In Fife, e-referrals between community optometrists and the hospital eye service reduced referral rates by 37% (21). Potential cost savings were predicted and whilst this scheme has great potential to reduce the costs of hospital eye care, commissioners must initially assess whether their region has the appropriate IT infrastructure to support e-technology

Similar innovations using electronic transfer of OCT images to triage referrals from community optometry services have been developed in Salford. These services rely on well integrated IT systems, such as allowing community optometrist and hospital eye services access to NHS mail or, where also needed, N3 connections.

e)   How do we ensure timely and appropriate access to out-of-hours services?

In primary care out of hours services are run via NHS24 utilising general practitioners. Minor ophthalmic complaints will be dealt with through this service.

Comprehensive, reliable out of hours hospital emergency eye care is provided by different hospital eye units in different ways, and is not available in all hospitals, having been centralised in some areas. It is important that all units have agreed reliable administrative and clinical arrangements when covering each other and that reliable arrangements for on-going follow up are made between organisations.

Another aspect to consider is that almost all Ophthalmic Specialist Training (OST) for ophthalmologists is hospital-based. An assessment should be made on the potential impact on training if more care is moved to the community. New training opportunities for training in the community may be required.

Recommendation: CCGs should ensure that suitable agreements are in place for out of hours services for all services they commission. Training should not be affected by any changes proposed.

Examples of innovative systems for urgent conditions

The examples below demonstrate where joint working especially with optometrists have helped deliver eye care in the primary care/community setting. **However, it remains unclear if these schemes have actually helped to reduce overall costs and there is also a lack of audit as to outcomes of those patients not referred to hospital.**

NHS Grampian *-Formation of the Grampian Eye Health Network*
The walk-in service at Aberdeen's eye department was increasingly being used by the public for non-urgent eye problems. With over 6,000 patient episodes annually and increasing which led to long waits for patients, a chaotic environment and specialist resources being used to treat non-urgent cases. The Grampian scheme was established whereby all new 'emergency' patients were first assessed by a local optometrist within working hours. This successfully reduced the numbers of patients referred to the hospital eye service.

Wales PEARS (Primary Eyecare Acute Referral Scheme) model - *Optometric primary care intervention service to facilitate the early assessment of acute ocular conditions*.
Patients are seen within 24hrs of making an appointment and are self-referred or directed to the service by a GP. Optometrists are paid under an enhanced services contract to detect, and in some cases manage, urgent conditions under the guidance of agreed pathways. This has enabled patients to remain in primary care and potentially free up some GP resources.
A weakness with the PEARS model is that the service is not available out of hours and a facility for 24/7 access to assessment by an ophthalmologist is still necessary for a proportion of ophthalmic emergencies.

It is however important to note that the perceived **urgency** of an eye condition is a much stronger determinant of referral (or self-referral) patterns than the perceived **seriousness** of the eye condition. Hospital eye departments therefore treat large numbers of patients out of hours although those conditions could possibly be treated in the community, if appropriately trained personnel were able and available at these times. Attempts to reduce the workload of hospital eye departments by increasing the provision of primary eye care clinics for minor non-urgent eye conditions will be unsuccessful if large numbers of patients with minor eye

conditions continue to bypass the primary care service on the grounds of perceived urgency and attend out of hours emergency departments. It should also be noted that the schemes referred to above operated in areas where the local hospital previously offered a 'walk in' service to which patients could self refer.   The results therefore cannot be extrapolated to eye departments which run referral only emergency services (from GPs, optometrists and local A&E departments).

Recommendation: Primary Care/Community services for eye care need to be carefully audited for quality, safety and cost-effectiveness before being rolled out on a national scale.

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Glossary:

Consultant Ophthalmologist: The Consultant Ophthalmologist is a registered medical practitioner who has been admitted onto the UK specialist register by virtue of having undergone approved training, passed essential professional examinations and acquired appropriate experience in all the relevant ophthalmic subjects, both surgical and medical. Consultants are responsible for all the patients in their care, and for supervising and training junior doctors.

An ophthalmologist is a medically trained doctor who commonly acts as both physician and surgeon. (S)he examines, diagnoses and treats diseases and injuries in and around the eye. Ophthalmologists undergo extensive training, a typical training route is:

- Entry into a medical school with at least 3 excellent A levels.
- 5 years at a medical school leading to a degree in medicine (eg MBChB).

- 2 years as a newly qualified doctor doing basic medical training called the Foundation programme. Full registration with the General Medical Council occurs after the first year of this training.
- 7 years of ophthalmic specialist training (OST) during which time rigorous examinations set by the Royal College of Ophthalmologists must be passed.

Ophthalmology workforce for England 2014

Specialty	Consultant	Associate Specialist	Specialty Doctor	Staff Grade	In training
Ophthalmology	1,042	227	294	20	577

Community or Primary Care Ophthalmologists: Undergo the same training as ophthalmologists as described above. However, it is unusual except in large units to have a consultant-led primary care service which prioritises referrals and redirects them to subspecialty services where appropriate. The concept of a "general" or "comprehensive" ophthalmologist has not until recently been promoted as a career option. However, training in both urgent eye care (emergency ophthalmology) and primary ophthalmology is essential for those who will form the next generation of consultants. The allied professionals providing some primary care ophthalmology services need training, supervision, and support from ophthalmologists to ensure good standards of care.

Ophthalmic Medical Practitioner: OMPs are ophthalmologists who undertake NHS sight tests under the General Ophthalmic Services contract. The National Health Service (Performers Lists) Amendment and Transitional Provisions Regulations 2008 state that an OMP is "a registered medical practitioner" who has undertaken postgraduate training in ophthalmology. Applications to join the central list of OMPs must be reviewed and approved by the Ophthalmic Qualifications Committee following which the OMP may apply to join the ophthalmic performers' list.

The responsibilities of OMPs in conducting NHS sight tests are the same as those of optometrists and both have an important role in the primary detection of eye disease. In the course of sight testing, symptoms and signs of eye disease may become evident and the OMP has the additional role of taking a history, conducting an ophthalmic examination as appropriate, and referring patients for further investigation and treatment where indicated.

Some OMPs also work in the Hospital Eye Service or as General Practitioners or in other health care settings.

Optometrist: Optometrists are trained professionals who examine eyes, test sight, give advice on visual problems, and prescribe and dispense glasses or contact lenses. They also recommend other treatments or visual aids where appropriate .Optometrists are trained to recognise eye diseases, referring such cases to other specialists as necessary, and can also use or supply various eye drugs. They are usually employed in the high street but may also work in the Hospital Eye Service. Some have an enhanced role in caring for patients with stable chronic eye conditions.

A typical training route is:
- Entry into a university optometry department with 3 good A levels
- 3 years at university leading to a degree in optometry (eg BOptom (Hons))
- 1 year of pre-registration experience
- Completion of Professional Qualifying Examination set by the College of Optometrists
- Registration with the General Optical Council

Orthoptists: Orthoptists diagnose and treat defects of vision and abnormalities of eye movement. They are a crucial members of the NHS eye care team and work closely with ophthalmologists, optometrists and vision scientists. Being part of a multi-disciplinary team means they are involved in the diagnosis and management of conditions such as:
- glaucoma
- cataract
- stroke
- retinal disease
- neurological disorders

Examining patients with eye problems, such as those related to ocular motility, binocular vision, amblyopia (lazy eye) or strabismus (squint) is one of their main responsibilities. Some screen the vision of children in schools and community health centres.

Ophthalmic Nurse: Ophthalmic nurses assist with assessment, diagnosis, and treatment of patients with various eye diseases and injuries. Assessing and diagnosing patients often requires ophthalmologists and ophthalmic nurses to physically examine their patients' eyes and record symptoms. Ophthalmic nurses may also be required to check a patient's vision by asking them to read an eye chart from a distance. Ophthalmic nurses also play an important role in treating patients with eye problems. They may offer tips and advice to patients looking to manage eye pain or other symptoms, for instance. They may also administer medications, or show patients how to administer medications like eye drops on their own. If corrective lenses are required to improve a patient's vision, an ophthalmic nurse will also help ensure that the patient's glasses or contacts fit properly. Ophthalmic nurses might also be required to assist during surgery as well as care for the patients afterward. The Royal College of Nursing has published a competency framework for ophthalmic nurses.

Optician: Opticians are technicians trained to design, verify and fit eyeglass lenses and frames, contact lenses, and other devices to correct eyesight. They use prescriptions supplied by ophthalmologists, who are medical doctors and surgeons or optometrists, but do not test vision or write prescriptions for visual correction. Opticians are not permitted to diagnose or treat eye diseases.

Eye Clinic Liaison Officer: The ECLO works closely with consultants and other medical staff and is an integral part of the ophthalmology team. They assist people with a visual impairment, their relatives and carers to get the support they need when sight loss first becomes a concern to ensure appropriate referral to community based statutory and voluntary services. They are key to achieving integrated care.