# SCHEDULE 2 – THE SERVICES

1. **Service Specifications**

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| **Service Specification No.** |  |
| **Service** | Minor Eye Conditions Service (MECS) – Harrogate and Rural District CCG |
| **Commissioner Lead** | Suzanne Savage |
| **Provider Lead** | TBC (“the Provider”) |
| **Period** | 1 February 2017 to 31 January 2019 |
| **Date of Review** | November 2018 |

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| **1. Population Needs** |
| * 1. **National/local context and evidence base**

NHS England’s publication **Improving eye health and reducing sight loss – a call to action (June 2014, Gateway Ref 01731)** sets outthe sustainability challenges facing our NHS and in relation to eye services these are:- **The population is growing and people are living longer** – *there is an association between age and a deterioration in eye health*; *an ageing population and an increase in the number of people with multiple long term conditions suggests a higher incidence of eye disease and sight loss in the future* – **Health inequalities** - *people from more socially deprived areas have a higher risk of poor health and premature mortality, and there is a known link between social exclusion and preventable sight loss* – **Constrained financial outlook** - *there is an increased demand on NHS resources against a forecast financial gap of £30bn; the increased incidence of eye disease and sight loss will increase demands on health and social care budgets and will increase capacity demands in hospitals and in the community* The document also outlines aims to:* Improve quality and outcomes;
* Improve the patient experience;
* Improve financial efficiency in how the NHS commissions eye health services;

and details the social and economic benefit of good eye health.A significant increase is forecast in the number of people with eye health problems, explained partly by the forecast increase in the number of elderly people and in the number of people with multiple long term conditions, including those for which there are known risks for eye health. The Local Eye Health Network for North Yorkshire and Humber sets out the following national priorities:1. Improving access to sight test for hard to reach groups
2. Support the Health and Wellbeing Boards (HWB) to develop an effective Eye Health Needs Assessment (EHNA) to link to the Joint Strategic Needs Assessment which drives commissioning strategy
3. Improving and redesigning services in line with National Eye Health pathways
4. Support better integration of primary, secondary and social care services around patients’ needs and improved outcomes.

Locally, feedback gained from HaRD CCG patients (October 2015) showed that the most commonly treated conditions over the previous 12 months were in relation to Glaucoma; Retina related and Other, eg. blocked tear ducts, blood, diabetes, nerve/scan and ulceration conditions. Future services should be dementia friendly, consider disabilities and the environment for the general population. Availability, Quality of Care, Workforce and the Environment were the main areas identified as good experience/areas for improvement. |
| **2. Outcomes** |
| **2.1 NHS Outcomes Framework Domains & Indicators**

| **Domain 1** | **Preventing people from dying prematurely** |  |
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| **Domain 2** | **Enhancing quality of life for people with long-term conditions** |  |
| **Domain 3** | **Helping people to recover from episodes of ill-health or following injury** |  |
| **Domain 4** | **Ensuring people have a positive experience of care** | **X** |
| **Domain 5** | **Treating and caring for people in safe environment and protecting them from avoidable harm** | **X** |

**2.2 Local defined outcomes*** Creation of a network of community optometrists with the skills, competencies and capacity to provide a Primary eye health service
* Improved access to high quality eye health care in the community for the diagnosis and management of minor eye conditions.
* Reduction in GP attendances for minor eye conditions
* Reduction in unnecessary emergency department attendances for minor eye conditions.
* Reduction in hospital outpatient attendances for minor eye conditions or minor eye procedures.
* Increased capacity of Primary care optometry services to manage minor eye conditions within the community.
* Secure the best value for the financial investment that the NHS makes in eye health services locally, utilising the skill mix available in hospital and community resources
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| **3. Scope** |
| * 1. **Aims and objectives of service**

3.1.1The service aims to improve eye health and reduce inequalities by providing increased access to eye care in the community.3.1.2 The service utilises the knowledge and skills of primary care ophthalmic practitioners to triage, manage and prioritise patients presenting with an eye condition.3.1.3 Access to eye care for the conditions described in paragraph 3.2.8 will enable more patients to receive treatment closer to their homes.3.1.4 The service is expected to reduce the number of unnecessary referrals from primary care to secondary care, supported by the provision of more accurate referral information if a referral is made.3.1.5 Relationships between ophthalmic practitioners, GPs, Pharmacists and the Clinical Commissioning Group will be further developed.Payment3.1.6 Payment for the service will be on a monthly basis, based on a cost per case arrangement, invoiced in arrears to the CCG to be paid once validated against non-patient-indefinable backing documentation**3.2 Service description/care pathway**3.2.1 The service provides for the assessment and treatment of a number of eye care conditions in the community**.**3.2.2 The service is provided by accredited local ophthalmic practitioners (the ‘subcontractor’) who have a range of equipment to facilitate detailed examination of the eye, as well as the specialist knowledge and skill**.** 3.2.3 The service shall be provided during the hours of 0900 to 1700 hrs Monday to Friday as a minimum. 3.2.4 Referrals to the service shall be made in accordance with paragraph 3.3.3.2.5 An ophthalmic practitioner or other person employed or engaged by the ‘Provider’ in respect of the provision of the services under the term of the contract ("other responsible person") may refuse to provide the service if an ophthalmic practitioner is unavailable to provide the service within the timescale provided for in paragraph 3.2.6. 3.2.6 On receipt of a referral (including a self-referral), the ophthalmic practitioner or other responsible person shall arrange for the assessment and, where appropriate, the treatment of the patient, within two working days of such referral. NB: Please note that Flashes and Floaters would need to be seen within - one working day whereas ‘routine’ cases can be treated within a longer time frame. (see Flashes and floaters guidelines Appendix 1 and Flashers and Floaters care pathway Appendix 2)Follow-Up Process3.2.7 Treatments shall not routinely attract a follow-up appointment. All follow-up appointments must be clinically justified.3.2.8 Symptoms at presentation included in the service:  This service provides for the assessment and management of patients presenting with any of the following: • Loss of vision including transient loss • Ocular pain • Systemic disease affecting the eye • Differential diagnosis of the red eye (Appendices 3and 3a) • Foreign body and emergency contact lens removal (not by the fitting practitioner) • Dry eye • Epiphora (watery eye) • Trichiasis (in growing eyelashes) • Differential diagnosis of lumps and bumps in the vicinity of the eye • Recent onset of Diplopia • Flashes/floaters • Retinal lesions • Field defects • GP/Pharmacist referral  • Lid disease i.e. blepharitis, entropion, ectropion, Meibomian gland dysfunction. Where necessary, follow up after 2/3 weeks from time of assessment to consider alternative treatment advice if no improvement.**3.2.9 Glaucoma Repeat Testing:**a) Primary open angle glaucoma is an optic neuropathy documented by visual field loss and optic disc changes for which raised Intra Ocular pressure (IOP) is a risk factor – it cannot be diagnosed by a single parameter. • Primary open angle glaucoma can occur at any IOP. • Glaucoma patients tend to have higher IOPs in the morning. • Approximately 5% of people over 50 will have an IOP measured greater than 21mmHg on a single visit. • Early optic disc changes may precede visual field defects. • Ptosis, spectacle lens rim, refractive error, lens opacities and pupil size all affect visual field results, as do patients’ concentration span, anxiety and comprehension of the test.b) The Provider will repeat fields, IOP, or both under this scheme plus assess the anterior angle depth using Van Herrick or similar where the patient meets the acceptance criteria set out below. If a patient meets the acceptance criteria, the Provider should check the suspicious findings under this scheme. This means that if the patient’s IOP is >21mmHg the optometrist should recheck on a separate occasion, (ie a different day) using an applanation method (Goldmann or Perkins). If there is a field defect present, the Provider should repeat the visual fields full or supra threshold technique – not Frequency Doubling Technique, although this can be done as the ‘first’ fields). The participating optometrist can claim an additional fee for repeating these tests. c) This service is not for patients presenting with signs of suspect glaucoma that the Practitioner would normally refer to secondary care on the basis of the initial readings eg high IOP and obviously cupped discs. If the discs alone are suspicious then the patient should be referred to hospital regardless of any other parameters. Patients should be referred to hospital where: • IOP alone on repeat: IOP >21 mmHg by applanation tonometry Visual field alone – consistent glaucomatous-type defect. If repeat field defect is consistent but unlikely to be glaucomatous and cannot be explained refer via GOS 18 or equivalent, but complete fee claim forms. • IOP and discs – IOP >21mmHg (by applanation) along with suspicious optic disc or cup asymmetry of 0.2 or greater. Note: Discs and fields – if both show definite glaucomatous change, IOP is ‘irrelevant’. The Provider should arrange for repeat glaucoma testing (repeating fields, pressures or both) in the following circumstances: • IOP alone (i.e. normal fields and disc appearance) – IOP >21mmHg in either eye by applanation or air puff tonometry (N.B. at least 4 air puff readings should be taken on each eye). ; • A difference in IOP reading between the two eyes of greater than 5 mmHg by applanation or air puff tonometry with normal fields and disc appearance (NB at least 4 air puff readings should be taken on each eye); • Visual field alone (i.e. normal IOP and disc appearance) –visual field loss (i.e. ‘suspicious’ or ‘defect’ on Henson or equivalent).  Repeat tests for suspected glaucoma should not be carried out where:  • Patients have definite chiasmal and post-chiasmal visual field defects. These cases should be referred;  • There is a visible and untreatable cause of field loss such as dry or end-stage wet age-related macular degeneration. These patients should not have fields repeated or be referred again. If there appears to be an additional cause for the field loss such as some glaucoma type defect on top of the known cause then they should be referred for specialist opinion. (For macular problems see Appendices 4 and 4a) d) In addition, the following cases should be referred to secondary care and not repeat tested: • Acute glaucoma (angle-closure or rubeotic) – such cases should be referred as an emergency via the accepted urgent referral method; • Patients with IOPs of 45mmHg and over should be referred as an emergency • Patients with pressures over 35mmHg (and less than 45mmHg) or raised pressure in the presence of active uveitis should be considered urgent and not within the scope of this scheme and should be referred via the accepted urgent referral method; • Patients identified as possibly having glaucoma or ocular hypertension at a domiciliary visit will not be able to have a full assessment in that environment and, on practical grounds, will be exempt from this scheme. Such patients should be referred to the Hospital Eye Service; • Patients presenting with the following should be referred via GOS 18 or equivalent as they are not part of the refinement scheme. A fee payable under this scheme cannot be claimed for disc assessment alone: a) Optic disc appearance alone – pathological cupping must be unequivocal. Disc size should be considered when deciding whether or not discs are suspicious – large cups on large discs are less likely to be suspicious than large cups on small discs. b) Change in optic disc – documented change in disc appearance (i.e. cup size, neuro-retinal rim configuration, new haemorrhage or change in cup/disc of 0.2 or greater.e) The treatment of long term chronic conditions is not included within this specification.f) An NHS sight test shall not normally be performed concurrently with assessment or treatment for this acute service except where, in the clinical opinion of the practitioner, this is considered to be necessary and appropriate. In such circumstances the Provider should ensure that the record is clear as to why this is the case.3.2.10 Proceduresa) Such procedures shall be undertaken as deemed clinically necessary by the relevant ophthalmic practitioner after assessment of the patient’s History and Symptoms.b) All tests undertaken and results obtained must be recorded on the Optometric Patient Record, even if the results are normal.c) Any drugs or staining agents used during the examination or prescribed must be recorded on the Optometric Patient Record.d) All advice given to the patient (verbal or written) must be recorded on the Optometric Patient Record.e) All detailed retinal examinations shall be undertaken under mydriasis using either 0.5% or 1.0% Tropicamide from a single dose unpreserved unit (Minim) unless this is contraindicated. The reason for not dilating must be recorded on the Optometric Patient Record.f) The level of examination should be appropriate to the reason for referral. All procedures are at the discretion of the ophthalmic practitioner; however the following guidelines should be adhered to:  • Fundus examination should be through a dilated pupil when required or appropriate. • Examination of an uncomfortable red eye must involve a slit-lamp examination used in conjunction with a staining agent. • Visual field examination results must be in the form of a printed field plot rather than a written description. • Symptoms of a sudden reduction in vision should be investigated by the examination of the macula and retina using a Volk or similar lens  • Symptoms of sudden onset flashes and floaters should be investigated by an examination of the anterior vitreous and peripheral fundus with a Volk or similar lens and relative afferent pupil defect (RAPD) testing is essential.  • Epilation of eyelash capability is essential.3.2.11 EquipmentThe Provider will ensure the following equipment is available: • Slit lamp • Contact Tonometer • Threshold field equipment to produce a printed field plot • Ophthalmoscope • Amsler charts • Epilation equipment • Diagnostic drugs (mydriatics, stains, local anaesthetics etc) • Volk type lens • Equipment to remove foreign bodies • Fundus camera (Optional for assessment and management of pigmentary changes in fundus.)3.2.12 Medicationa) Ophthalmic practitioners may sell or supply all pharmacy medicines (P) or general sale list medicines (GSL) in the course of their professional practice, including 0.5% Chloramphenicol antibiotic eye drops in a 10ml container.b) Ophthalmic practitioners may give the patient a written (signed) order for the patient to obtain the above from a registered pharmacist, as well as the following prescription only medicines (POMs):  • Chloramphenicol • Cyclopentolate hydrochloride • Fusidic Acid • Tropicamidec) In making the supply to the patient the ophthalmic practitioner must ensure: • Sufficient medical history is obtained to ensure that the chosen therapy is not contra-indicated in the patient • All relevant aspects, in respect of labelling of medicine outlined in the Medicine Act 1968 are fully complied with • The patient has been fully advised on the method and frequency of administration of the productd) In general, supply via a pharmacist is preferred. The College of Ophthalmic practitioner s has produced guidelines on the use & supply of drugs as part of its ‘Guidance for Professional Practice’ If the patient is exempt from prescription charges, supply of appropriate treatments could be covered by Group Prescribing Directives and/or by Minor Ailment Services in accordance with The National Pharmacy Enhanced Service Plan already in existence. 3.2.13Referral and Patient Pathwaya) Accredited ophthalmic practitioners will receive referrals from GPs, self-referrals and signposting from other providers such as NHS 111, Ripon MIU, Community pharmacists or attending another ophthalmic practitioner who does not provide the service. An ophthalmic practitioner may refer a patient to themselves for a MECS assessment if the patient and their condition fulfil the MECS requirements, the ophthalmic practitioner would otherwise have referred the patient, and s/he believes that undertaking a MECS assessment may avoid the necessity for referral. b) Each patient requiring an assessment and/or treatment under the service will be provided with an Information Leaflet describing the service and including a list of Subcontractors (which is produced by the Provider).c) If the subcontractor is unable to provide for the assessment and where appropriate, the treatment of the patient within the timescale described in paragraph 3.4, the Provider or (ophthalmic practitioner or other responsible person) shall direct the patient to an alternative provider of the services, by way of the list of subcontractors supplied by the Provider. d) If urgent onward referral to hospital eye services is required, in accordance with paragraph 3.4.1, the ophthalmic practitioner shall advise the relevant hospital eye service by telephone and a copy of the Optometric Patient Record shall be given to the patient to present on attendance.e) Where a sight test/routine eye examination is required, the Provider, ophthalmic practitioner or other responsible person shall direct the patient to their usual community ophthalmic practitioner. A copy of the patient's Optometric Patient Record shall be emailed via secure mail (eg nhs.net to nhs.net) where possible to such community ophthalmic practitioner within twenty four hours or given to the patient to present on attendancef) The ophthalmic practitioner or other responsible person shall provide the patient with a paper copy of their Optometric Patient Record Card, if requested.g) The Provider, ophthalmic practitioner or other responsible person shall send a copy of each patient's Optometric Patient Record to the patient's GP, where a prescription is required, (unless they have the relevant qualification and can issue an NHS prescription if appropriate) within one working dayh) The Provider shall provide all appropriate clinical advice and guidance to the patient in respect of the management of the presenting condition.i) Where appropriate, the Provider, ophthalmic practitioner or other responsible person shall provide the patient with an Information Leaflet on his/her eye condition.j) Should a patient fail to arrive for an appointment, the ophthalmic practitioner must contact the patient within - one working day, informing them that they have missed their appointment, and ask them to arrange a further appointment.k) Should a patient fail to re-arrange an appointment within 7 working days of contact being made (or fails to attend their re-arranged appointment) then the ophthalmic practitioner will inform the patient’s GP.l) The Provider shall be responsible for ensuring that the NHS Directory of Services is kept up to date.m) The Provider will provide the CCG with a regularly updated list of Subcontractors providing the primary eye care service for circulation to GPs and optometric practices.**3.3 Population covered**Patient Eligibility3.3.1The service is available to all persons registered with a GP practice located within the geographical area of Harrogate and Rural District Clinical Commissioning Group who are 18 years of age and over, for the duration of the contract period.3.3.2 The subcontractor shall ensure that the patient is an eligible person by verifying the patient’s GP before providing the community service.**3.4 Any acceptance and exclusion criteria and thresholds**Symptoms at presentation not included in the service:3.4.1 The following conditions require the patient to attend an ophthalmic hospital (which includes an ophthalmic department of a hospital) casualty or accident and emergency department ("hospital eye services"): • Severe ocular pain requiring immediate attention • Suspect Retinal detachment • Retinal artery occlusion • Chemical injuries • Penetrating trauma • Orbital cellulitis • Temporal arteritis • Ischaemic optic neuropathy • Acute loss of vision • Meibomian cysts needing excision (“Meibomian cysts needing excision would need prior approval (NB: Referral of patients with Meibomian cysts or chalaza which are symptomatic (eg, infection resistant to treatment, astigmatism, rosacea or sebaceous dysfunction), or which have not resolved spontaneously within two years, may be made to the CCG’s Individual Funding Request panel.)3.4.2 The treatment of long term chronic conditions is not included within the service. Conditions excluded from the service include:  • Diabetic retinopathy • Long standing adult squints • Long standing diplopia3.4.3 An NHS sight test shall not be performed concurrently with assessment or treatment for this acute service. Please note that the ophthalmic practitioner will need to prioritise the urgency of the conditions presented. For example Flashes and Floaters will need to be seen within 24 hours.3.4.4 Sub-contractors are not permitted to advertise the service on an individual practice basis, the service can only be advertised as a whole service.**3.5 Interdependence with other services/providers**The Provider will develop and maintain appropriate relationships with relevant others who support the patients’ overall care pathway. This will include all optometrists and secondary care providers and sub-contractors within the scope of this contract.Those supporting the delivery of the overall care pathway whom the Provider will work closely and collaboratively with include, but is not restricted to: * + - * GPs and Optometrists
			* NHS Providers, including acute and mental health within the region
			* HaRD Clinical Commissioning Group
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| **4. Applicable Service Standards** |
| **4.1 Applicable national standards (eg NICE)** Clinical Management Guidelines <http://www.college-optometrists.org/en/professional-standards/clinical_management_guidelines/index.cfm>4.1.1 Clinical Management Guidelines for specific conditions should be adhered to unless this is contraindicated. All clinical decisions and advice given to patients must be recorded on the Optometric Patient Record.  **4.2 Applicable standards set out in Guidance and/or issued by a competent body (eg Royal Colleges)**  The provider must be on the NHS England Area Team National Ophthalmic performers list. **4.3 Applicable local standards**4.3.1Accreditation – education and traininga) The ’Provider’ will ensure that all ophthalmic practitioners employed or engaged by the ’Provider’ in respect of the provision of the community services shall satisfy the accreditation criteria detailed in this paragraph (4.3.1).b) To become accredited the provider will ensure that, ophthalmic practitioners must be able to identify a range of ocular abnormalities and must demonstrate proficiency in the use of the above mentioned equipment. Participating Ophthalmic practitioner s must be registered with the General Optical Council.c) Participating ophthalmic practitioners must complete the Cardiff (WOPEC)/LOCSU PEARS Distance Learning modules (Part 1) and the associated Practical Skills Demonstration (Part 2). Part 1 must be completed before Part 2. An ophthalmic practitioner who has a relevant higher qualification and experience may be exempt from the PEARS Distance Learning and/or the Practical Skills Assessment at the discretion of the Clinical Lead. An optometrist who has a relevant higher qualification and experience may be exempt from the PEARS Distance Learning and/or the Practical Skills Assessment at the discretion of the Clinical Lead. Please note that the clinical lead would have to look at the time elapsed since the qualification and experience. Over 5 years since the qualification would not be sufficient for example.d) Ophthalmic practitioners will be required to attend appropriate training to cover the admin procedures and protocols involved in providing the community service. The training session will cover: • An introduction to the service  • Administration of the service including protocols, processes and paperworke) Ophthalmic practitioners will be required to successfully complete an accreditation process before authorisation is given to provide the service by the provider.f) Ophthalmic practitioners will be required to undertake appropriate Peer Review Activity during the contract period.g) The Provider shall be responsible for ensuring that all persons employed or engaged by the Provider in respect of the provision of these services under the contract period are aware of the administrative requirements of the service. |
| **5. Applicable quality requirements and CQUIN goals** |
| * 1. **Applicable Quality Requirements (See Schedule 4A-C)**

 **Clinical Governance**Quality in Optometry**5.1.1** The Provider must ensure compliance of Subcontractors to complete Level One and NHS standard contract level of Quality in Optometry within 3 months of the contract commencement date and provide evidence of this to the Provider for Commissioner assurance if requested to do so.Significant Incident Reporting5.1.2 A record of all significant incidents (SIs), near misses and potential incidents must be maintained. SIs must be reported in line with the letter of agreement.5.1.3 All complications resulting from a MECS examination or treatment must be recorded on the patient record.**Safeguarding**5.1.4 Section 11 of the Children Act 2004 places duties on a range of organisations and individuals to ensure their functions, and any services that they contract out to others, are discharged having regard to the need to safeguard and promote the welfare of children. (Working Together to Safeguard Children; HM Government, 2015). To fulfil this requirement, the organisation should demonstrate:* Clear leadership and governance processes within the organisation in respectof safeguarding children;
* A safeguarding children policy which is consistent with statutory guidance and has clear links to local multi-agency procedures.
* A training strategy which ensures that all staff receive safeguarding children training commensurate with their role. For healthcare organisations, such training must be in line with national guidance (RCPCH 2014 “Safeguarding children and young people: roles and responsibilities for healthcare staff” or any subsequent revision).
* Safe recruitment practices and arrangements for dealing with allegations against people who work with children and young people.
* Access to specialist safeguarding children advice and support.
* Effective arrangements for engaging and working in partnership with other agencies, particularly LSCBs (via formal sub-groups, task and finish groups, links with Designated Professionals for Safeguarding Children).

5.1.5 Chapter 14 of the Care Act 2014 sets out the duties and guidance for organisations and individuals in relation to safeguarding adults. The organisation must demonstrate:Clear leadership and governance processes in respect of safeguarding adults.A safeguarding adults policy which is consistent with statutory guidance and has clear links to local multi-agency procedures.A Consent to Treatment policy which is consistent with the Mental Capacity Act 2005. A training strategy which ensures that all staff receive safeguarding adults and mental capacity act training commensurate with their role. Safe recruitment practices and arrangements for dealing with allegations against staff who work with adults with care and support needs.Access to specialist safeguarding adults advice and support* Effective arrangements for working in partnership with other agencies, establishing links with the local Safeguarding Adults Board and with Designated Professionals for Safeguarding Adults.

Infection Control5.1. 6 Premises must be kept clean; this includes all areas of public access.5.1.7 In all consulting and screening rooms used, hard surfaces should be regularly cleaned using appropriate hard surface solution / wipes.5.1.8 Hand washing facilities must be provided in, or near, to consulting / screening rooms.5.1. 10 Hot and cold water should be available, and liquid soap and paper towels provided.5.1.11 All equipment that comes into contact with patients must be cleaned after each patient. This may be by using antiseptic wipes (or similar) for head / chin rests or by using disposable chin rests.5.1.12 Disposable heads should be used for Tonometer prisms.5.1.13 Epilation equipment must be sterilised between patients.Waste Management5.1.14 In accordance with College of Ophthalmic practitioner s guidelines used tissues and paper towel can be disposed of in your normal ‘black bag’ waste.5.1.15 Part-used (or out of date) minims need to be incinerated, and can be discarded in a medicine disposal box.5.1.16 Chloramphenicol is regarded as hazardous waste and requires specialist incineration.Clinical Audit5.1.17 The Provider will ensure its subcontractors participate in any clinical audit activity as reasonably required by the CCG, and maintain appropriate records to evidence and support such activity, including an electronic spreadsheet showing patient outcomes.See also section 7 below.* 1. **Applicable CQUIN goals (See Schedule 4D)**

 Not applicable. The contract value is inclusive of CQUIN. |
| **6. Location of Provider Premises** |
| **The Provider’s Premises are located at:**TBC  |
| **7. Key Outcome and Performance Indicators** |
| **7.1** Performance reporting and Audit - ReportingRequirements and Timescales7.1.1 A report on activity and patient outcomes shall be forwarded by the Provider to the CCG by the 10th working day after month end following the month in which the patients received the service, in line with the letter of agreement. 7.1.2 Quarterly reports to be reviewed through contract meetings will include:* Number and percentage of patients being seen within 48 hours (95% or below triggers a consequence of breach)
* Number and percentage of patients with suspected glaucoma seen within 14 days for a second contact applanation (95% or below triggers a consequence of breach)
* Number and percentage of suspect glaucoma patients seen within 14 days (below 100% triggers a consequence of breach)
* Number and percentage of patients who were referred for urgent attention via Optometry A&E provision
* Information on Serious Incidents, Compliments, Complaints and Concerns for the period
* Breakdown of presenting symptoms
* Breakdown of outcomes following first visit
* Breakdown of outcomes post follow up
* IOP outcomes

7.13 Clinical Governance issues shall be reported by the Provider to the CCG by exception in accordance with paragraph 5.1.14.7.1.4 Complaints shall be reported quarterly by the Provider to the CCG (as per above).7.1.5 Other relevant information required from time to time by the CCG shall be provided by the Provider in a timely manner.Patient Experience7.1.6 The Provider will undertake a patient survey by distributing to all patients, a questionnaire at the time of their appointment and provide report to the CCG on an annual basis.**7.2** Service Review The Provider and Subcontractor shall co-operate with the CCG as reasonably required in respect of the monitoring and assessment of the services, including: • Answering any questions reasonably put to the Provider by the CCG • Providing any information reasonably required by the CCG • Attending any meeting or ensuring that an appropriate  • representative of the Provider attends any meeting (if held at a reasonably accessible place and at a reasonable hour, and due notice has been given), if the Provider presence at the meeting is reasonably required by the CCG • The Provider may also be asked to justify the number of appointments specifically relating to NAEVI cases. The provider may be required to report on outliers and any action taken to deal with the outliers.**7.3** Record Keeping and Data Collection7.3.1 The Provider will ensure that the ophthalmic practitioner shall fully complete, in an accurate and legible manner, an Optometric Patient Record to allow for full and complete reporting as defined by the commissioner for each patient managed. 7.3.2 The Optometric Patient Record will provide for: • The urgent referral of patients by an ophthalmic practitioner to the hospital eye services • The referral of patients to their GP for joint management • The referral of patients to their usual community ophthalmic practitioner for a sight test/ routine eye examination • The management of patients by the ophthalmic practitioner7.3.3 The Provider shall also maintain a summary of: • The number of patients for whom an appointment was booked and the source of the referral (as set out in paragraph 3.3.1)• The number of appointments booked for patients who did not attend ("DNAs")7.4Participating accredited ophthalmic practitionersThe Provider will provide the CCG with a list of accredited ophthalmic practitioner and will provide monthly updates if required. |

Appendix 1

Flashes and Floaters Management Guidelines

Terminology

The following terms are important in this text:

**Retinal break**

This is a retinal hole, operculum or tear

**Retinal detachment**

This is any type of retinal detachment including rhegmatogenous, traction or exudative

*Optometric Assessment*

History and symptoms

A full and thorough history and symptoms is essential. In addition to the normal history and symptoms, careful attention must also be given to the following:

*History:*

* Age (over 50 year olds more likely to develop breaks)
* Myopia (over -3D)
* Family history of retinal break or detachment
* Previous ocular history of break or detachment
* Systemic disease (e.g. Diabetes, Marfan syndrome)
* History of recent ocular trauma, surgery or inflammation

*Symptoms:*

* Loss or distortion of vision (a curtain / shadow / veil over vision)
* Floaters
* Flashes

For symptoms of *floaters* these *additional questions* should be asked:

* Are floaters of recent onset?
* What do they look like?
* How many are there?
* Which eye do you see them in?
* Any flashes present

For symptoms of *flashes* these *additional questions* should be asked:

* Describe the flashes?
* How long do they last?
* When do you notice them?

For symptoms of a *cloud, curtain or veil* over the vision these *additional questions* should be asked:

* Where in the visual field is the disturbance?
* Is it static or mobile?
* Which eye?
* Does it appear to be getting worse?

*Symptoms of less concern:*

* Long term stable flashes and floaters
* Symptoms >2 months

Clinical examination

All patients presenting for a MECS examination with symptoms indicative of a potential retinal detachment should have the following investigations (in addition to such other examinations that the optometrist feels are necessary):

* Tests of *pupillary light reaction* including swinging light test for Relative Afferent Pupil Defect (RAPD), *prior to pupil dilation*
* **Visual acuity** recorded and compared to previous measures
* *Tonometry*, noting IOP discrepancy between eyes
* Visual Field examination at discretion of optometrist
* *Slit lamp bio microscopy of the anterior and posterior segments, noting:*
	+ Pigment cells in anterior vitreous, 'tobacco dust' (Shafer’s sign)
	+ Vitreous haemorrhage
	+ Cells in anterior chamber (mild anterior uveitic response)
* Dilated pupil fundus examination with *slit lamp binocular indirect ophthalmoscopy using a Volk or similar fundus lens* (wide field fundus lens optimal) asking the patient to look in the 8 cardinal directions of gaze and paying particular attention to the superior temporal quadrant as about 60% of retinal breaks occur in that area. Noting:
	+ Status of peripheral retina, including presence of retinal tears, holes, detachments or lattice degeneration
	+ Presence of vitreous syneresis or Posterior Vitreous Detachment (PVD)
	+ Is the macula on or off (i.e. does the detachment involve the macula or not)
* Alternatively, if the optometrist is familiar and confident then a dilated pupil fundus examination with *headset binocular indirect ophthalmoscopy using a 30D lens with scleral indentation or a fundus contact lens* could be used.

Management

Local hospital arrangements may vary for dealing with retinal problems. It is vital to be aware of the local arrangements as this may affect the management of patients.

*Symptoms requiring assessment within 24 hours:*

1. Sudden increase in number of floaters, patient may report as "numerous", "too many to count" or “sudden shower or cloud of floaters” Suggests blood cells, pigment cells, or pigment granules (from the retinal pigment epithelium) are present in the vitreous. Could be signs of retinal break or detachment present
2. Cloud, curtain or veil over the vision. Suggests retinal detachment or vitreous haemorrhage – signs of retinal break or detachment should be present

*Signs requiring referral within 24 hours:*

1. Retinal detachment with good vision unless there is imminent danger that the fovea is about to detach i.e. detachment within 1 disc diameter of the fovea especially a superior bulbous detachment, when urgent surgery is required.
2. Vitreous or pre-retinal haemorrhage
3. Pigment 'tobacco dust' in anterior vitreous
4. Retinal tear/hole with symptoms

*Signs requiring referral ASAP next available clinic appointment:*

1. Retinal detachment with poor vision (macula off) unless this is long standing
2. Retinal hole/tear without symptoms
3. Lattice degeneration with symptoms of recent flashes and/or floaters

*Require discharge with SOS advice (verbal advice and a leaflet):*

1. Uncomplicated PVD without signs and symptoms listed above
2. Signs of lattice degeneration without symptoms listed above

Explain the diagnosis and educate the patient on the early warning signals of further retinal traction and possible future retinal tear or detachment:

* Give the patient a *Retinal Detachment warning leaflet*
* Instruct the patient to *return immediately or go to A&E if flashes or floaters worsen*

Referral letters

Patients requiring referral for retinal breaks or detachment must have the following noted on the referral form to the ophthalmologist. Letters should be typed whenever possible and may be faxed or sent with the patient in urgent cases.

* A clear*indication of the reason for referral* e.g. Retinal tear in superior temporal periphery of right eye
* A brief description of any *relevant history and symptoms*
* A *description of the location* of any retinal break / detachment / area of lattice
* In the case of retinal detachment *whether the macula is on or off.*
* The *urgency* of the referral

Record keeping

Optometrists are reminded to keep full and accurate records of all patient encounters. This includes when the patient is spoken to on the telephone (by the optometrist or another member of staff) as well as when they are in the consulting room. All advice that is given to the patient should be carefully noted, together with any information that was given to the patient. Patient leaflets about retinal detachment are available from the AOP website; <http://www.aop.org.uk/uploads/uploaded_files/flashes_and_floaters_px_info_sheet_final_jan053.pdf> Negative as well as positive findings should be noted (e.g. ‘no retinal tears or breaks seen’).

*Flashes and Floaters*

Patient Information

The following information sheet may be used to provide written backup following a verbal explanation of the symptoms and risks of posterior vitreous detachment. The text can be transferred to your own headed paper. The text is written so as to be easily understood by the general public, so we advise that it is not altered. It should be laid out using a clear font in a reasonably large size, as in the example below.

This information sheet is intended for use by the optometrist to augment verbal information and explanations given to the patient in the consulting room. It is not intended as a general waiting room information leaflet and it should not be used as an alternative to appropriate verbal explanations and warnings.

It is always wise to fully document your actions on the patient’s record card and this should include a note that you have issued written advice to the patient.

*Flashes and Floaters*

Patient Information Sheet

What are floaters?

Often, people who have healthy eyes see floaters. They appear as spots, lines or cobweb effects, usually when you look at a plain surface such as a white wall or a clear blue sky. They often appear when the clear jelly in the main part of your eye gets older.

What are flashes?

Sometimes the jelly in the main part of your eye shrinks a little and tugs on the retina (the light-sensitive layer) at the back of your eye. This can cause flashes of light at the edge of your vision. These differ from the disturbance of vision that can occur with migraine.

When should I be concerned?

If you suddenly notice a shower of new floaters, or floaters along with flashes or a dark shadow or “curtain” in your vision, then you should seek advice urgently. These symptoms can mean that the retina is tearing. Go to an Accident and Emergency Department if necessary.

What will happen if the retina tears?

The retina is at the back of your eye. It receives the images and sends them to the brain. This is one of the things that enable you to see. If the retina tears, it may come away from the back wall of the eye. This is called **retinal detachment**. It can result in partial or complete loss of vision.

How is retinal detachment treated?

A tear may be treated by using a laser. If treated quickly, you may have a better chance of full recovery. However, if your retina has become detached, you will need surgery. The operation may restore most of your vision but may come too late for a full recovery.

Look out for:

* flashes or floaters getting worse
* a black shadow in your vision
* a sudden cloud of spots
* a curtain or veil over your vision
* any sudden loss of vision

**Go to an Accident and Emergency Department without delay if you notice any of these symptoms.**

Appendix 2

Flashes and Floaters Patient Pathway

Positive signs

**Refer**

Urgent 24hrs

Soon – next available clinic

Routine

Patient presents via MECS to Optometrist

Investigations as per protocol

Negative signs

**Discharge**

SOS advice

Explain / educate on RD

Given written warnings

**Symptoms of less concern**

* Stable flashes and floaters
* Symptoms >2 months
* Normal vision

**Clinically significant symptoms**

* Recent onset
* Increasing flashes and/or floaters
* Less than 6 weeks duration
* Field loss
* Cloud, curtain or veil over vision

Appendix 3

Red Eye Guidelines

Optometric Assessment

The College of Optometrists have produced Clinical Management Guidelines (CMGs) to provide an evidence based information resource on the diagnosis and management of various eye conditions[[1]](#footnote-1). There are currently 60 of these CMGs, the vast majority of which could apply to red eyes. These Clinical Management Guidelines were originally intended for specialist therapeutic prescribers but they are valuable to all optometrists.

History and Symptoms

A full and thorough history and symptoms is essential. Careful attention must be given to the following as appropriate:

History

* Previous ocular history
* Systemic disease, especially diabetes, thyroid dysfunction and inflammatory disease e.g. rheumatoid arthritis, ankylosing spondylitis, inflammatory bowel disease
* Recent cold, flu or infections
* Acne rosacea
* History of contact lens wear
* History of recent ocular trauma, pay particular note to hammer and chisel i.e. risk of penetrating injury and to possible chemical contamination
* History of recent ophthalmic surgery
* History of recent UV exposure e.g. sunlamp, welding
* Atopia e.g. hayfever, asthma, eczema
* Recent foreign travel
* Instillation of any eye drops, if so what are they?
* Systemic medication
* Allergies to drops, preservatives, medications
* Family history

Symptoms

* Discomfort, gritty sensation
* Itchiness
* Pain - sharp or aching on a scale of 1-10
* Discharge - watery, purulent, mucoid
* Unilateral or bilateral
* Duration of onset
* Acute, recurrent or chronic
* Photophobia
* Reduced vision
* Any predisposing factors

Clinical Examination

Include the following as appropriate according to symptoms and history:

* Visual acuity
* Pupil reactions – particularly check for RAPD (relative afferent pupillary defect)
* Ocular motility
* Exophthalmos
* Eyelids – inflammation, incomplete closure, ptosis, position & size of any lumps & bumps, misdirected eyelashes, lid margin disease (blepharitis, meibomianitis, phthiriasis i.e. crab louse, punctae (normal, occluded, absent, stenosed or plug inserted)
* Tears – quality and quantity plus tear break-up time
* Discharge – serous, watery (viral toxic), mucopurulent (bacterial) or stringy (allergic)
* Bulbar conjunctiva – redness (use grading scale e.g. CCLU) note depth of vessel injection (conjunctival, episcleral, sclera) and location (perilimbal, sectoral, diffuse, localized) subconjunctival haemorrhage, pigment, raised areas
* Palpebral conjunctiva – evert upper and lower lids to look for foreign bodies, scarring, membranes, papillae, follicles & concretions.
* Corneal epithelium – note any defects (size, location, pattern e.g. superficial punctate keratitis, dendritic, geographic) FBs, infiltrates ( pattern, size, location, depth), oedema, deposits ( location, pattern, material e.g. iron, calcium, filaments)
* Corneal stroma – size, location & depth of opacities- infiltrates, scars, oedema. Note any vessel infiltration – ghost or active vessels
* Corneal endothelium – thickening guttatae, folds or breaks in Descemets’ membrane, location, pattern & type of any deposits (KPs, pigment, blood)
* Anterior chamber – depth & Van Herrick assessment of anterior angles. Any cells, flare or blood
* Iris – heterochromia, atrophy, nodules, pigment dispersion, posterior synechiae, new vessels (note is not unusual to see vessels in light coloured irides), peripheral iridotomy

Management[[2]](#footnote-2)

Practitioners should recognise their limitations and where necessary seek further advice or refer the patient elsewhere

Symptoms requiring emergency referral

* Sudden severe ocular pain
* Severe photophobia
* Unexplained sudden loss of vision
* Painful red eye in CL wearer, unless due to FB/torn CL, (retain CLs, case and solutions for culture)
* Severe trauma

Signs requiring emergency referral (to eye casualty, ophthalmic outpatient clinic or accident and emergency)

* Circumcorneal flush
* IOP>45mmHg
* Chemical injury
* Hyphaema
* Hypopyon
* Penetrating injury or deep corneal foreign body
* Corneal ulcer unless small and marginal
* Cells or flare in anterior chamber
* Dendritic ulcer in CL wearer (possible acanthamoeba)
* Deep corneal abrasion
* Corneal abrasion contaminated with foreign material
* Proptosis, restricted eye movements, pain with eye movement, pyrexia (fever >38c)

Signs requiring urgent referral (within one week)

* Rubeosis (new iris vessels)
* IOP >35mmHg (and ,<45mmHg) unless due to acute closed angle glaucoma
* New case of facial palsy or those with loss of corneal sensation
* Pyrexia (fever >38c), with lid oedema, warmth, tenderness & ptosis

Symptoms requiring routine referral

* Slow developing, non-resolving lesion of eyelid skin
* Epiphora causing symptoms

Signs requiring routine referral

* Non-resolving lid lump
* Severe ectropian with symptoms
* Entropian
* Obstructed naso lacrimal duct
* Pterygium threatening vision or associated with chronic inflammation

Referral Letters[[3]](#footnote-3)

Urgent and emergency referral letters may be faxed or sent with the patient. Telephone the ophthalmic casualty unit or ophthalmic unit to arrange for the patient to be seen.

Routine referral letters should be emailed directly from Optomanager and should be sent to the Choice Office via NHS Email to yhcs.choice@nhs.net  with ‘MECS’ in the subject heading. All referral letters/forms should include the following:

* Date
* Full name of referring optometrist & practice address
* Full details of patient including name, address, telephone number, date of birth, reason for referral, supporting signs and symptoms; reports of relevant tests/ investigations, including copies of any supplementary data
* A clear indication of the reason for referral
* Provisional diagnosis
* Indication of urgency
* Clearly state if the report is for information only

[www.college-optometrists.org/en/professional-standards/clinical\_management\_guidelines/index.cfm](http://www.college-optometrists.org/en/professional-standards/clinical_management_guidelines/index.cfm).

Red Eye Pathway 3a

Patient presents to MECS Optometrist

Optometrist takes history and symptoms; examines patient and makes initial diagnosis

**Manage in practice**

* Bacterial conjunctivitis
* Allergic conjunctivitis
* Non-herpetic viral conjunctivitis
* Subconjunctival haemorrhage
* Tear Dysfunction (Dry eye)
* Episcleritis
* Marginal keratitis
* Superficial abrasions
* Recurrent epithelial erosion
* Small corneal foreign bodies:
* Remove
* In-growing eyelash:
* Remove

**Treat and advise**

* Antimicrobials
* Mast cell stabilisers
* Ocular lubricants
* Artificial tears
* Topical antihistamines
* Ibuprofen

**Follow up**

 Generally none expected

**Exceptions**

* Repeated in-growing lashes
* Dry eye

**No improvement?**

Refer to secondary care

**Urgent telephone referral**

* Infective keratitis
* Anterior uveitis
* Posterior uveitis
* Scleritis

Complete record and report to GP

Follow up in Secondary care

Appendix 4

Age-related Macular Degeneration (AMD)

Assessment and Management Guidelines Terminology

The following terms are important in this text & for differential diagnosis:

Wet (exudative) AMD

Condition caused by the growth of abnormal blood vessels under the retina. Symptoms appear suddenly and progress over days or weeks. Person complains of central metamorphopsia (distortion) and/or central loss of vision. The most important signs are sub-retinal fluid and haemorrhage.

Dry (atrophic) AMD

Condition caused by the accumulation of waste products under the retinal pigment epithelium. Symptoms develop gradually and progress over months or years. Most people are asymptomatic but may eventually complain of difficulty reading and poor vision in dim light. The most important signs are drusen, pigment epithelial atrophy and pigment clumping (so-called pigmentary changes).

*Optometric Assessment*

History and symptoms

A full and thorough history and symptoms is essential. In addition to the normal history and symptoms, careful attention must also be given to the following:

*History*

* Age (over 55 years)
* Family history of maculopathy
* Previous ocular history
* Systemic disease e.g. hypertension, diabetes
* History of ocular surgery- cataract extraction, retinal detachment repair
* Myopia
* Medication e.g. chloroquine derivatives, tamoxifen
* Smoking status (current, ex-smoker or non-smoker)
* Excessive exposure to sunlight (UV)

*Symptoms*

* + Any change in vision
	+ Loss of central vision
	+ Spontaneously reported distortion of vision

These *additional questions* should be asked:

* When did loss of vision start?
* In which eye are symptoms present?
* Has the loss of vision occurred suddenly or gradually?

Clinical examination

All patients presenting for a MECS examination with symptoms indicative of a potential macular degeneration should have the following investigations (in addition to such other examinations that the optometrist feels are necessary):

* *Visual acuity* (distance and near) recorded monocularly and compared to previous measures
* *Refraction* as a hyperopic shift can be indicative of macular oedema
* *Amsler grid or similar assessment of central vision* of each eye
* Tests of *pupillary light reaction* including swinging light test for Relative Afferent Pupil Defect (RAPD), *prior to pupil dilation*
* Dilated pupil fundus examination of both eyes with *slit lamp binocular indirect ophthalmoscopy using a Volk or similar fundus lens* noting:
	+ Status of macula, including presence of
	+ Drusen, noting size
	+ haemorrhages, sub-retinal, intra-retinal, pre-retinal
	+ pigment epithelial changes i.e. hyper or hypo pigmentation,
	+ exudates,
	+ oedema i.e. sub-retinal fluid
	+ signs of sub retinal neovascular membrane

Management

If local protocols for the referral of AMD are in place, then these should be followed. If not, you should note that some HES ophthalmology departments will not have the facilities to deal with wet age related macular degeneration. In these cases it is best to telephone the department first to find out what procedures to follow.

*Referral ASAP next available clinic appointment:*

1. Sudden deterioration in vision + VA better than 3/60 in affected eye
2. Spontaneously reported distortion in vision + VA better than 3/60
3. Sub-retinal neovascular membrane
4. Macular haemorrhage
5. Macular oedema

*Routine referral:*

1. Patient eligible and requesting certification of visual impairment
2. Patients requesting a home visit from Social Services to help them manage their visual impairment in their home.
3. Patients requiring a low vision assessment (this may be in the community or the hospital
4. Patients requiring a routine ophthalmological opinion

*No referral and routine follow-up:*

1. Patients with VA 6/96 or worse in the affected eye
2. Patients with dry AMD, drusen and/or pigment epithelial changes
* Explain the diagnosis and educate the patient on the early warning signs of wet AMD.
* Give stop smoking advice via leaflet if appropriate + advice on healthy diet + protection from blue light
* Assess the risk of AMD progression by looking for large drusen (about the size of a vein at the disc margin or larger) and pigmentary changes. If these are both present bilaterally there is a 50% chance of progressing to advanced AMD within 5 years[[4]](#footnote-4). Give advice on a healthy diet unless there is moderate loss of vision or significant risk of loss. Provide information on AREDS findings & leaflet on AREDS 2 supplements
* Give information on local services for the visually impaired- public and third sector.
* Give appropriate information on national voluntary agencies e.g. RNIB, Macular Disease Society
* Give advice on driving
* Instruct the patient to *inform the practice or GP immediately if vision suddenly deteriorates or becomes distorted*.

Referral letters

Patients requiring referral for macular degeneration must have the following noted on the referral form to the ophthalmologist. Letters should be typed whenever possible and may be faxed or sent with the patient in urgent cases. The Royal College of Ophthalmologists fast track referral form for wet AMD can be used:

[www.college-optometrists.org/en/utilities/document-summary.cfm/docid/81143450-07B2-4A16-BA3ED6F3F7A86D77](http://www.college-optometrists.org/en/utilities/document-summary.cfm/docid/81143450-07B2-4A16-BA3ED6F3F7A86D77)

* Date
* Full name of referring optometrist and practice address
* Full details of patient including name, address, telephone number, date of birth
* Visual acuities
* A clear*indication of the reason for referral* e.g. macular haemorrhage
* A brief description of any *relevant history and symptoms including onset*
* *A description of the type of macular degeneration or signs* such as drusen, pigment epithelial changes, sub retinal neovascular membrane, haemorrhages, exudates, macular oedema.
* The *urgency* of the referral

Differential diagnosis

Macular hole

This is a hole at the macula caused by tangential vitreo-retinal traction at the fovea. Causes impaired central vision & typically affects elderly females

Macular epiretinal membrane

Can be divided into cellophane maculopathy and macular pucker

Central Serous Retinopathy

Typically sporadic, self-limited disease of young or middle-aged adult males. Unilateral localised detachment of sensory retina at the macula causing unilateral blurred vision.

Cystoid Macular Oedema

An accumulation of fluid at the macula most commonly due to retinal vascular disease, intra-ocular inflammatory disease or post cataract surgery,

Myopic Maculopathy

Chorio retinal atrophy can occur with high myopia, usually > 6.00D, which can involve the macula.

Diabetic Maculopathy

This is the commonest cause of visual impairment in type 2 diabetic patients. It can be exudative, ischaemic or mixed.

Vitelliform Macular Dystrophy (Best Disease)

There is an inherited condition with a juvenile and adult type.

Solar Maculopathy

Due to the effects of solar radiation from looking at the sun causing circumscribed retinal pigment epithelium mottling or a lamellar hole at the macula.

Drug Induced Maculopathies

Antimalarials e.g. chloroquine, hydroxychloroquine

Phenothiazines e.g. thioridazine (melleril), chlorpromazine (Largactil)

Tamoxifen

Idiopathic Macular Telangiectasia

This can be unilateral or bilateral.

Maculopathy Referral Pathway 4a

Positive signs

**Refer**

Soon – next available clinic using the appropriate pathway

Routine

Inform Social Services

So

Patient presents via MECS to Optometrist

Investigations as per protocol

Negative signs

**Discharge**

* SOS advice
* Explain / educate on types of maculopathy
* Give Amsler grid
* Advice on:
* smoking cessation
* Blue light
* Vitamin supplements

**Symptoms of less concern**

* Longstanding loss of vision
* Gradual deterioration in vision
* Normal vision

**Clinically significant symptoms**

* Loss of vision of recent onset
* Spontaneously reported visual distortion

1. <http://www.college-optometrists.org/en/professional-standards/clinical_management_guidelines/index.cfm> [↑](#footnote-ref-1)
2. <http://www.college-optometrists.org/en/utilities/document-summary.cfm/docid/729FE39F-3048-216E-804AA6284C06A348>

<http://www.college-optometrists.org/en/professional-standards/clinical_management_guidelines/index.cfm> [↑](#footnote-ref-2)
3. <http://www.college-optometrists.org/en/utilities/document-summary.cfm/docid/729FE39F-3048-216E-804AA6284C06A348> [↑](#footnote-ref-3)
4. A Simplified Severity Scale for Age-Related Macular Degeneration: AREDS Report No. 18 Age-Related Eye Disease Study Research Group,\* *Arch Ophthalmol*. 2005 November; 123(11): 1570–1574. [↑](#footnote-ref-4)