

Primary Eyecare Assessment & Referral Service (PEARS) - Pathways & Protocols

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Primary Eyecare (Heart of West Midlands) Ltd
&
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WECS PEARS PATHWAYS AND PROTOCOLS

Contents

1. Notes on Procedures

2. Appendices
 1. PEARS Care Pathway
 2. Guidelines for Flashes & Floaters Management
 3. Flashes & Floaters Patient Pathway
 4. AMD Management Guide
 5. Maculopathy Pathway
 6. Red Eye Pathway
 7. Lumps & Bumps
 8. Foreign Body Assessment
 9. Guidelines for Referral toWEI
 10. Triage

1 Procedures

- 1.1.1 Such procedures shall be undertaken as deemed clinically necessary by the relevant *ophthalmic practitioner* after assessment of the *patient's* History and Symptoms
- 1.1.2 All tests undertaken and results obtained must be recorded on the *Optometric Patient Record*, even if the results are normal.
- 1.1.3 Any drugs or staining agents used during the examination or prescribed must be recorded on the *Optometric Patient Record*.
- 1.1.4 All advice given to the *patient* (verbal or written) must be recorded on the *Optometric Patient Record*.
- 1.1.5 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*.
- 1.1.6 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 Superfield or Digital Widefield Volk or similar lens, and relative afferent pupil defect (RAPD) testing is essential. Use of both tropicamide 1% and phenylephrine 2.5% in both eyes is essential.
 - Epilation of eyelash capability is essential.

Clinical Management Guidelines (see appendices 2 and 4)

http://www.college-optometrists.org/en/professional-standards/clinical_management_guidelines/index.cfm

- 1.1.7 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*.

2 Equipment

- 2.1 See Service Specification 3.2.9

3 Medication

- 3.1 See service Specification 3.2.1

Prescriptions for supply by pharmacist should clearly indicate which of the available agents is prescribed.

If the patient is exempt from prescription charges this will be dealt with by the supplying pharmacist.

- 3.1.1 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 product
- 3.1.2 In general, supply via a pharmacist is preferred. The College of Ophthalmic practitioners has produced guidelines on the use & supply of drugs as part of its 'Code of Ethics & Guidelines for Professional Conduct' section 2.40.

4. Accreditation – education and training

- 41 The Contractor and all *ophthalmic practitioners* employed or engaged by the Contractor in respect of the provision of the *enhanced services* shall satisfy the accreditation criteria detailed in the service specification, and be registered with the GOC and the NHS England Performers List.
- 41.1 To become accredited, *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 practitioners must be registered with the General Optical Council.
- 41.2 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.
- 41.3 *Ophthalmic practitioners* will be required to attend a training session run by the LOC and CCG, primarily to cover the admin procedures and protocols involved in providing the service. The training session will cover:
- An introduction to the service
 - Administration of the service including protocols, processes and paperwork
- 41.4 *Ophthalmic practitioners* will be required to successfully complete a re-accreditation process every three (3) years.
- 41.5 *Ophthalmic practitioners* will be required to undertake appropriate Peer Review Activity in the third year of the Contract term.
- 41.6 The Contractor shall be responsible for ensuring that all persons employed or engaged by the Contractor in respect of the provision of the services under the Contract are aware of the administrative requirements of the service.

5 Patient pathway

This is detailed in Section 3.2 of the Service Specification.

Referral standards and information are provided in Appendix 5.

A 24 or 72 hour referral service is available at the WEI ARC clinic, as is the 2 week fast track suspected wet AMD pathway. Referrals will be by email on the Optomanager system.

Routine referrals and cancer pathway referrals are via email to the GP using Optomanager.

In all cases the patient shall be advised on the urgency and method of referral, and shall be advised to contact the referring practitioner in the event of not receiving an appointment.

Patients cannot be treated by the PEARS service if their signs or symptoms indicate they are more suitable for the following locally enhanced services:

- Direct referral for cataract and post-operative cataract care
- Intra-ocular pressure service
- Diabetic retinopathy

It is recognised that as patients are self-referring it is possible that they may attend the service with a condition which is excluded for treatment but requires assessment and onward referral to an appropriate eye service. This patient assessment by the MEC Service is classed as an episode of care and payment will be made.

6 Follow-up processes

See Service Specification Section 3.2.3.

7 Record keeping and datacollection

See Service Specification 3.2.13

8 Performance reporting and audit

See Service Specification 3.2.17

9 Service review

The Contractor shall co-operate with the LOC company and CCG as reasonably required in respect of the monitoring and assessment of the services.

10 Clinical governance

101 Please refer to the Service Specification for further details.

102 *Quality in Optometry*

The Contractor must complete Level One QiO at the commencement of the scheme and Level Two QiO by 15 January 2015, and provide evidence of this if requested to do so.

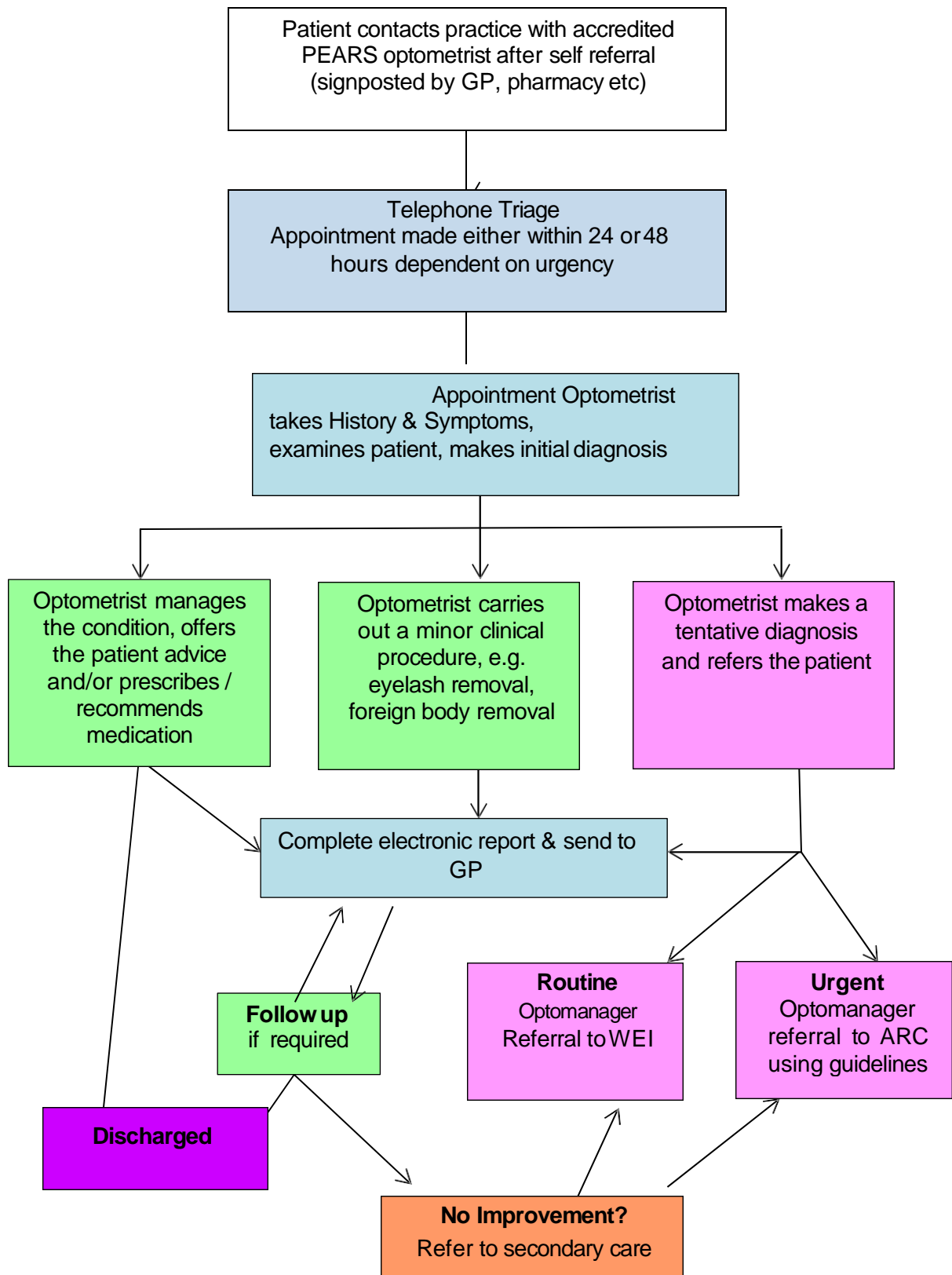
103.1.1 All equipment that comes into contact with patients must be cleaned after each patient. This may be by using antiseptic wipes (or similar) for head / chin rests or by using disposable chin rests.

103.1.2 Disposable heads should be used for Tonometer prisms.

103.1.3 Epilation equipment must be sterilised between patients.

11 Patient experience

11.1 The Contractor will participate in a patient survey by engaging patients in the completion of a patient questionnaire.



Guidelines for Flashes and Floater Management

Terminology

The following terms are important in this text:

Retinal break

This is an atrophic retinal hole, horse shoe (U) tear or operculated tear, giant retinal tear or retinal dialysis.

Retinal detachment

This is any type of retinal detachment including rhegmatogenous (more than 1 DD of subretinal fluid from edge of break), tractional 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
- Myopia
- Family history of retinal break or detachment
- Previous ocular history of break or detachment
- Systemic disease
- 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
- Normal vision

Clinical examination

All patients presenting for a PEARS examination with symptoms indicative of a potential retinal detachment should have the following investigations (in addition to such other examinations that the ophthalmic practitioner 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
- Contact tonometry, noting IOP discrepancy between eyes
- Visual Field examination at discretion of ophthalmic practitioner
- 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. It is essential that practitioners use a combination of Tropicamide 1% and Phenylephrine 2.5% to obtain optimal dilation. For the best possible peripheral viewing, practitioners are now required to use either a Volk Superfield lens or Volk Digital Widefield lens, or wide angle lenses from other manufactures. The use of a 90D would not be considered sufficient to adequately examine the far peripheral retina. Proceed by 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.

- The practitioner should note:
 - Status of peripheral retina, including presence of retinal tears, holes, detachments or lattice degeneration
 - Presence of vitreous syneresis, or Posterior Vitreous Detachment (PVD)- visualization of a definite posterior hyaloid membrane in the mid or posterior vitreous visible on dynamic vitreous examination, or the presence of a definite Weiss ring (as opposed to just vitreous opacities)

Management

The referring practitioner should refer the patient according to the guidelines below.

Symptoms requiring immediate referral within 24 hours:

1. Sudden increase in number of floaters, which 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 immediate referral within 24 hours:

1. Any retinal detachment (macular on or macular off) of recent/acute onset. Phone on-call ophthalmology doctor at Wolverhampton Eye Infirmary to arrange review as soon as possible. This review may be the same day or evening, or the next day, however it is essential that the ophthalmology team are aware of such a patient to schedule the earliest possible review and to schedule surgery as soon as possible.
2. Retinal detachment with poor vision (macula off) unless this is long standing (many months) retinal hole/tear without symptoms
3. Vitreous or pre-retinal haemorrhage
4. Pigment 'tobacco dust' in anterior vitreous
5. Horse shoe retinal tear of acute onset (no pigmentation and recent symptoms of PVD).

Signs requiring referral between 24 and 72 hours:

- Retinal detachment which from the patient history or retinal signs is clearly long-standing (months of symptoms, or is asymptomatic). Urgent but not necessarily immediate referral is desirable in order for the vitreoretinal team to be aware of the patient, to be able to confirm the diagnosis, and to plan and schedule surgery.

- Longstanding (many months) asymptomatic retinal tear (pigmented, and symptoms not suggestive of a recent-onset PVD).
- Fully operculated retinal tear with no subretinal fluid
- Atrophic retinal holes with >1 DD of subretinal fluid

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

1. Uncomplicated PVD without tobacco dust, vitreous haemorrhage or retinal breaks
2. Signs of lattice degeneration without symptoms listed above
3. Atrophic retinal holes with no signs of subretinal fluid, or subretinal fluid <1DD in diameter. Ensure clear verbal and written advice given to self monitor for PVD/ retinal detachment.
4. Small peripheral retinoschises (do not diagnose in a myope)

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/ PVD warning leaflet
- Instruct the patient to return immediately or go to A&E if flashes or floaters worsen

Referral letters

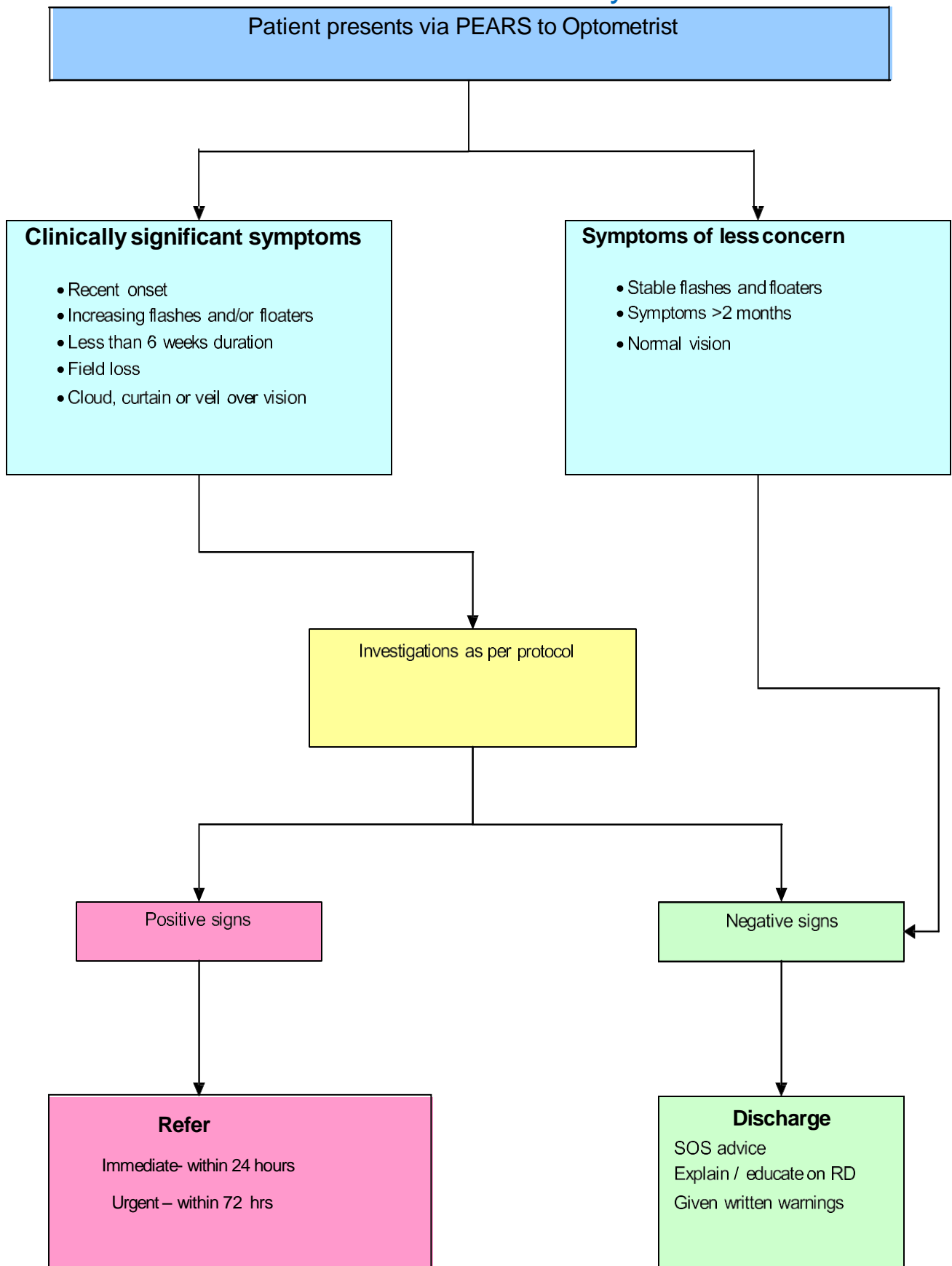
Patients requiring referral for retinal breaks or detachment from PEARS must be referred electronically via Optomanager; the referring optometrist should use the guidance for urgency given in this document. The referral email should include the following information:-

- 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

In the case of acute retinal detachments please also telephone the on-call ophthalmology doctor at Wolverhampton Eye Infirmary.

It is very important that the patient is aware of the reason for and urgency of referral and that they should expect a phone call from ARC within 24 hours. If the phone call is not forthcoming the patient should know what action is necessary.

Appendix 3 Flashes and Floaters Patient Pathway



Appendix 4

Age-related Macular Degeneration Management Guidelines

Terminology

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

Wet (exudative) AMD

This can progress very rapidly causing loss of central vision & metamorphopsia (distortion). It is characterised by sub retinal neovascular membrane, macular haemorrhages & exudates.

Dry (atrophic) AMD

A slowly progressive disease characterized by drusen & retinal pigment epithelial 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
- Family history of maculopathy
- Previous ocular history
- Systemic disease eg hypertension, diabetes
- History of ocular surgery- cataract extraction, retinal detachment repair
- Myopia
- Medication e.g. chloroquine derivatives, tamoxifen
- Smoking status
- Excessive exposure to sunlight/UV

Symptoms

- Loss of central vision
- Spontaneously reported distortion of vision

These additional questions should be asked:

- Is loss of vision of recent onset?
- In which eye are symptoms present?
- Has the loss of vision occurred suddenly or gradually?

Clinical examination

All patients presenting for a PEARS examination with symptoms indicative of a potential macular degeneration should have the following investigations (in addition to such other examinations that the ophthalmic practitioner 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
- Refraction as a hyperopic shift can be indicative of macular oedema
- Amsler grid or similar assessment of central vision
- Dilated pupil fundus examination with slit lamp binocular indirect ophthalmoscopy using a Volk or similar fundus lens noting:
 - Status of macula, including presence of drusen (& size), haemorrhages, pigment epithelial changes ie hyper or hypo pigmentation, exudates, oedema, signs of sub retinal neovascular membrane

Management

The urgent referral pathway to the macula clinic at WEI is now via PEARS and the referral should be made on the Optomanager **PEARS Suspect wet AMD referral** form to the macula clinic. The referral is electronic.

Symptoms requiring 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

Signs requiring referral ASAP next available clinic appointment:

1. Sub retinal neovascular membrane
2. Macular haemorrhage
3. Macular oedema

Requiring routine referral:

1. Patient eligible & 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 who require an assessment for LVA

4. Patients likely to benefit from an intra-ocular Galilean telescope system

Low Vision Aids may be available in the community or hospital eye service - this varies in different areas.

Requires routine follow up but provide an Amsler chart, verbal advice and a leaflet (see sheet appended).

- Dry AMD, drusen &/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
- Use 4 point scale to assess risk of AMD progression. Count one point for large drusen of 125 microns or larger (about the size of a vein at the disc margin) and one point for any pigmentary change. Score each eye separately and then add them together for a score out of 4. A full score of 4 points means a 50% chance of progressing to advanced AMD in the next 5 years. 3 points gives a 25% chance, 2 points a 12% chance and with 1 point the risk is just 3%.
- For those at intermediate risk of AMD progression give information on AREDS findings & leaflet on anti-oxidant 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
- Instruct the patient to inform the practice or GP immediately if vision suddenly deteriorates or becomes distorted.

Referral letters

Patients requiring fast track referral for macular degeneration must be referred using the electronic referral form on Optomanager.

The Royal College of Ophthalmologists fast track referral form for AMD can be used www.college-ophthalmic-practitioners.org/en/utilities/document-summary.cfm/docid/81143450-07B2-4A16-BA3ED6F3F7A86D7

- A clear indication of the reason for referral. e.g. macular haemorrhage
- A brief description of any relevant history and symptoms
- A description of the type of macular degeneration or signs of 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 & 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.

Solar Maculopathy

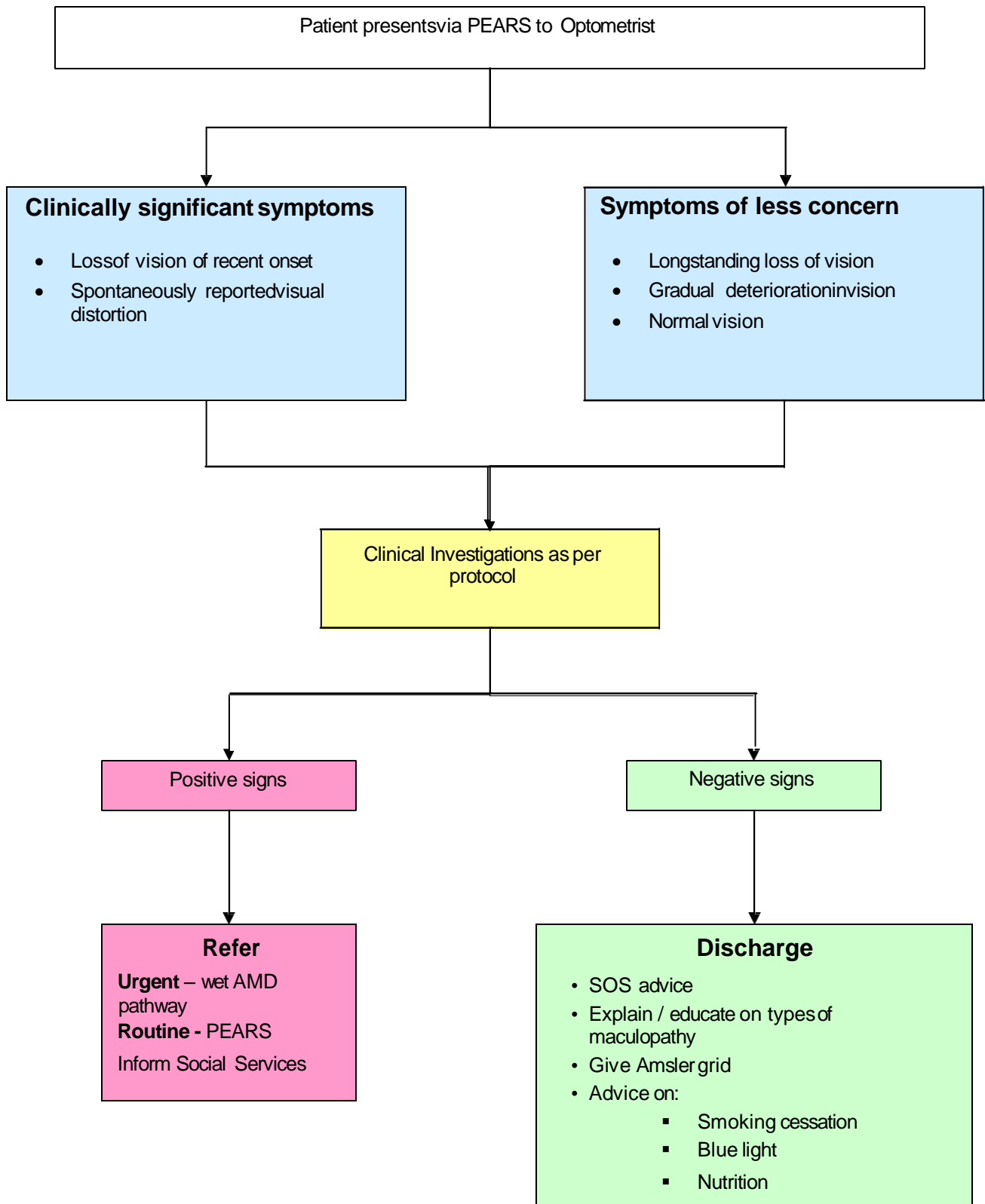
Due to the effects of solar radiation from looking at the sun causing circumscribed retinal pigment epithelium mottling or a lamellar hole at the macula.

Drug Induced Maculopathies

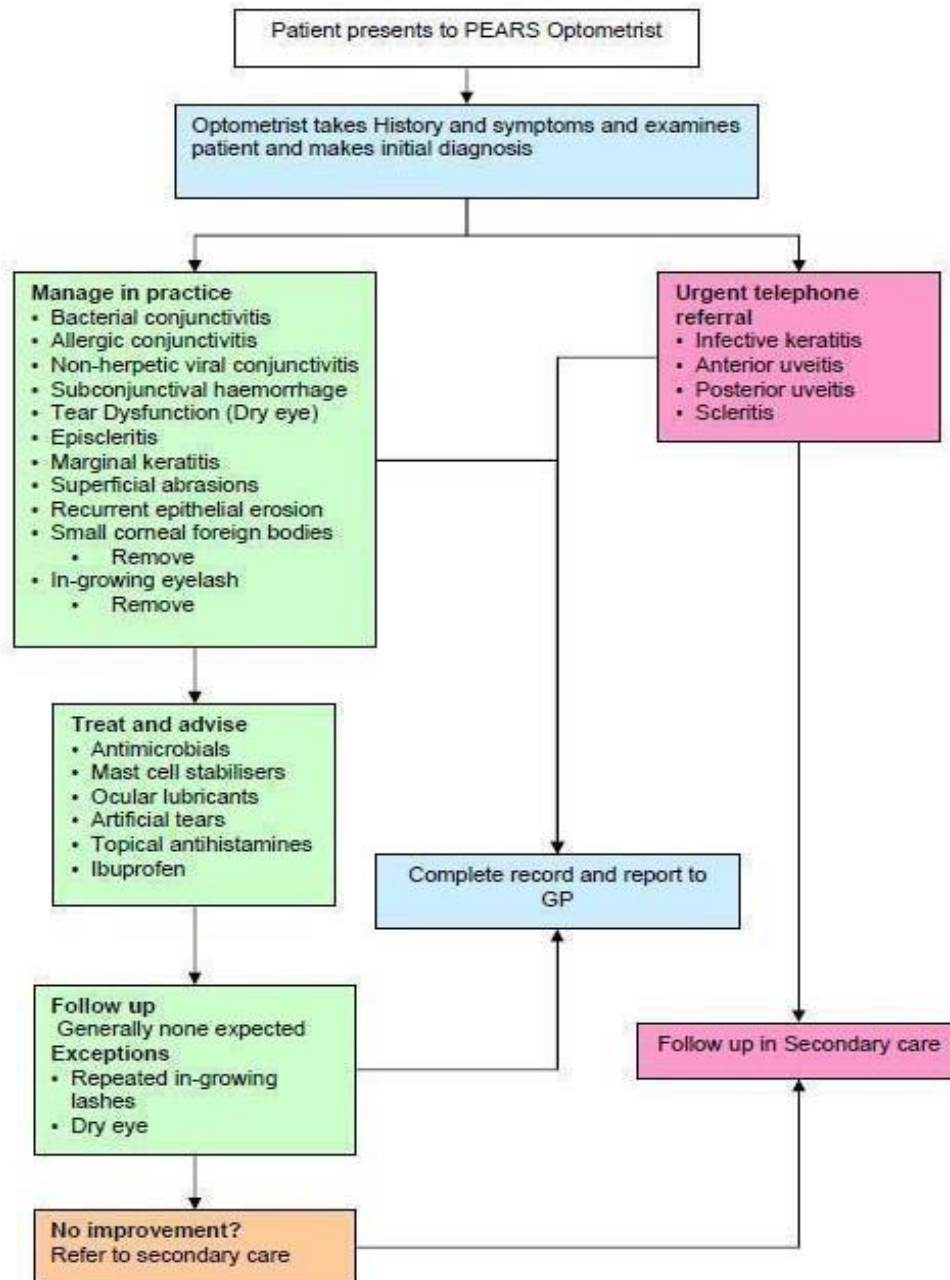
Antimalarials eg chloroquine, hydroxychloroquine

Phenothiazines eg thioridazine (melleril), chlorpromazine (Largactil)

Tamoxifen



Red Eye Pathway



Lumps & Bumps

History

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:

- **How long been there?**
- **Discomfort / tender to touch?**
- **Discharge?**
- **Itching?**
- **Bleeding?**
- **Increased in size?**

Clinical Examination

All patients presenting for a PEARS examination with symptoms and sign of lumps and bumps should have the following investigations (in addition to such other examinations that the optometrist feels are necessary):

- **Slit lamp examination to include observation of:**
 - **Appearance** (note: e.g. fluid filled cyst, grape like cluster)
 - **Lash disturbance**
 - **Presence of redness or pigmentation**
 - If available, **size measurement with graticule**
 - **Associated conditions** (note: e.g. blepharitis associated with hordeolum)
 - **Presence of corneal staining from mechanical interaction**

Suspect Foreign Body Optometric Assessment

History

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:

- **Size and nature** (i.e. gardening matter, metal) of suspect FB
- **Speed of entry** (i.e. windblown, metal from grinding)
- **Length of time in eye**
- **Any attempt made to self- or other to remove**

Clinical Examination

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

- **Anesthetise eye** (note: will make examination easier as more comfortable for Px to open eye)
- **Visual Acuity**, before & after removal
- **Slit Lamp examination, must include:**
 - **Eversion of lids**
 - **Ask Px to look to extreme positions of gaze to check under lids**
 - **Check of globe & adnexa for signs of penetration**
 - **Check of AC for cells/flare**
 - **Fluorescein assessment**
 - **Check for Seidel's sign**
- **Pupil Reactions**
- **Dilated fundal examination**, if penetration suspected

Removal (Consider least invasive first)

- **Irrigation**
- **PVA Spears** (note: for superficial FB)
- **Needles** (note: for deeper or more long standing FB)

Aftercare

Consider:

- **Chloramphenicol**
- **Viscous ointment** (for comfort during day)
- **Lacrilube** (to prevent recurrent erosion during healing, overnight use)
- **Follow Up**

Urgent PEARS Ophthalmological Referrals to WEI

Note that the list below is not intended to be exhaustive and is for guidance only

Conditions for ARC Urgent referral

Painful red eye

- Corneal ulcer
- Anterior uveitis
- Corneal FB
- Acute angle closure
- Chemical Injury

Sudden recent (<48 hrs) loss of vision

- Retinal detachment (*includes retinal tear with no RD*)
- CRAO (<12 hrs old)
- Optic Neuritis / AION
- Unexplained sudden loss of vision

Papilloedema

Orbital cellulitis

Penetrating Injury

Conditions for ARC Referral that should be seen in <72 hrs

Loss of vision (<1/12 duration)

- CRVO / BRVO
- Macular hole
- CSR
- Optic neuritis / AION

Recent onset binocular diplopia

PVD related symptoms with pigment in vitreous (<1/12)

Vitreous Haemorrhage (recent onset)

Macula Fast-Track Referral

Wet macular degeneration with signs/symptoms that fit the fast track criteria

(No change from current pathway careful use above criteria to minimise false +ves)

Routine Referrals

Referrals for other conditions that are not urgent should be via email to the patients' GP. These include Suspected Cancer Referrals which should be clearly indicated on the referral form for admittance to the 2-week cancer pathway.

'Suspected cancer' referrals - clarification

- **Periocular Tumours**
 - Basal cell carcinoma Refer as "urgent" to the oculoplastics clinic
 - Squamous cell carcinoma Refer via GP
- **Intraocular tumour** (eg melanoma) – Refer to ARC to be seen within 72 hours

Guidance for referral to WEI Acute Referral Clinic from PEARS

The referring clinician should use the guidance notes when a condition has been identified and refer with appropriate urgency.

The referral is electronic and direct to the appropriate clinic. (24hr and 72hr referrals are made to the same email address whilst wet AMD referrals are faxed and you should ensure the referral form reflects the appropriate details and is sent to the correct destination.

Urgent referrals will normally be seen within 24 hours and will be prioritised by staff at ARC.

ARC will contact the patient by telephone to offer the appointment.

The referring clinician should:-

- Ensure the appropriate contact phone number is given in the referral
- Brief the patient to expect the appointment to be offered by phone
- Alert the patient to the level of urgency and advise the patient to contact or return to your practice if an appointment is not received when expected

Referral emails - **Urgent 24hr referrals** to rwh-tr.optometry-referrals@nhs.net;

Urgent 72hr - referrals to rwh-tr.optometry-referrals@nhs.net;

Routine - practices email to patient's GP for processing to RWH via usual channels, for out-of-area GPs post the Optomanager PDF to the relevant GP.

Suspected Wet AMD (2 weeks) Referrals to be faxed using the Optomanager referral PDF to Wolverhampton Eye Infirmary on 01902 695847.

Telephone Triage Protocol

All patients that present for the PEARS service whether via the telephone or in person must undergo Triage, to assess eligibility for the service and urgency of appointment required. The information gathered from this Triage must be entered on to the IT platform.

There are a set of questions to be asked to determine these two aspects. Following the guidance will enable the person carrying out the triage to either, book an appointment within 24hrs, book an appointment within 48hrs, refer to accredited optometrist for further triage or advise the patient unsuitable for this service and re direct them to a more appropriate service.

The guidance, and a form for staff to complete if this assists, are available separately as the PEARS Triage Guidance and Form.