Primary Eyecare Acute Referral Scheme (PEARS) Accreditation

Barbara Ryan and Nick Sheen
Directors, Wales Optometry Postgraduate Education Centre 2011
1.0 Summary of PEARs Training and Accreditation

LOCSU has developed a care pathway for a primary eyecare assessment and referral service (PEARs).

A PEARs examination will provide a timely assessment of the needs of a patient presenting with an eye condition. This will be undertaken by an accredited optometrist within suitably equipped premises who will manage the patient appropriately and safely. Management will be maintained within the primary care setting for as many patients as possible, thus avoiding unnecessary referrals to hospital services. Where referral to secondary care is required it will be to a suitable specialist with appropriate urgency.

Purpose of the service

Using the skills of primary care optometrists to triage, manage and prioritise patients presenting with an eye condition, patient care will be improved by:

- improving access
- refining referrals
- ensuring referrals are appropriate and timely
- retaining patients in primary care where appropriate
- signposting to other appropriate services

There are two parts to training and accreditation for PEARs provided by Cardiff University. Part 1 must be completed before Part 2 can be started.

The PEARs service has been used by over 80% of optometrists throughout Wales since 2003. Crucially, it has been evaluated and the results published in a peer reviewed journal. The service was found to be clinically appropriate, was readily accessible for all patients, had excellent patient satisfaction ratings and was cost effective. The PEARs service continues to be undergo regular scrutiny, audit and evolution.

Part 1 Distance Learning Lectures

Practitioners must pass a course of theoretical training.

- 7 lectures provided on CD ROM
- 12 MCQs for each lecture
- MCQ answers are uploaded onto a website which gives instantaneous results
- Pass Mark for each lecture is 60%
- 2 CET points are accredited per lecture i.e. 14 CET points in total
Part 2 Objective Station Clinical Examination

Practitioners must then pass a practical assessment.

- 5 Stations
- 5 minutes per station
- Designed to assess: Referral; Communication; Clinical Decision Making; Volk BIO

2.0 Optometric competencies covered in the PEARS training and accreditation

Twenty two core competencies are covered in the training and/or assessed in the OSCEs.

1) The ability to take an accurate history from patients with a range of optometric conditions
2) The ability to elicit significant symptoms
3) The ability to elicit relevant family history
4) The ability to elicit issues pertaining to the patient's general health, medication, work, sports, lifestyle and special needs
5) The ability to impart to patients an explanation of their physiological or pathological eye condition
6) An ability to understand a patient's fears, anxieties and concerns about their visual welfare, the eye examination and its outcome
7) The ability to discuss with a patient the importance of systemic disease and its ocular impact, its treatment and the possible ocular side effects of medication
8) An ability to understand the patient's expectations and aspirations and manage empathetically situations where these cannot be met
9) The ability to communicate bad news to patients in an empathetic and understandable way
10) The ability to interpret and investigate the presenting symptoms of the patient
11) The ability to develop a management plan for the investigation of the patient
12) The ability to identify external pathology and offer appropriate advice to patients not needing referral
13) An understanding of risk factors for common ocular conditions
14) The ability to recognise common ocular abnormalities and to refer when appropriate
15) The ability to manage a patient presenting with a red eye
16) The ability to manage a patient presenting with reduced vision
17) The ability to manage a patient presenting with macular degeneration
18) The ability to evaluate and manage a patient presenting with symptoms suggestive of retinal detachment
19) An understanding of the role of optometrists in shared care schemes
20) The ability to assess symptoms and signs of neurological significance
21) The ability to assess pupil reactions
22) The ability to examine fundi using direct and indirect techniques

3.0 Outline of Part 1 Distance Learning Lectures

Seven lectures are provided on CD ROM for participating practitioners. Each lecture has 12 MCQs embedded within it and participants must upload the answers onto a website.

To move to Part 2 a score of at least 60% must be attained for each lecture. A pass in each lecture is worth 2 CET points i.e. 14 CET points in total.

3.1 Lecture 1  AMD Part 1

This lecture presentation reviews the prevalence and risk factors for AMD. It then goes on to outline the anatomical changes that occur in Dry and Wet AMD and the clinical signs that result. The investigation techniques that a PEARs accredited optometrist should employ as part of revised protocols are then described with an emphasis on differential diagnosis with other conditions and of treatable and non-treatable AMD.

Learning objectives

- Understand the risk factors associated with AMD.
- Understand the aetiology of Dry and Wet AMD.
- Understand the presenting symptoms and signs of dry and Wet AMD, know the what techniques to use to use in each case.
- Understand how to make a differential diagnosis with other eye conditions and between treatable and non-treatable AMD

3.2 Lecture 2  The red eye

A practice-based approach is used in this distance learning lecture presentation to assess and manage a patient presenting with a red eye. The lecture aims to alert the listener to the typical signs and symptoms of different causes of a red eye. Management options for the common causes of red eye are also discussed with particular emphasis on those causes of red eye which are amenable to optometric management without the need for further referral
Learning Objectives

- Understand the typical signs and symptoms associated with different causes of red eye
- Know the commoner causes of red eye
- Know what additional questions to ask a patient presenting with red eye and how to interpret the answers
- Understand the management options for the commoner causes of red eye
- Understand the management plan for red eye in a PEARs scheme and in particular those amenable to optometric management without the need for further referral

3.3 Lecture 3 Flashes and Floaters

A practice-based approach is used in this distance learning lecture presentation to assess and manage a patient presenting with flashes and floaters. The lecture reviews the anatomy of retinal detachment, the causes of flashes and floater symptoms, what to ask patients, what to look for, the techniques to use and the management applicable to a Primary Eyecare Acute Referral Scheme (PEARS) registered optometrist.

Learning objectives:

- Understand the relationship between rhegmatogenous retinal detachment and posterior vitreous detachment and the causes of flashes and floaters within these contexts.
- Understand the commoner causes of flashes and floaters.
- Know what additional questions to ask a patient presenting with symptoms of flashes and floaters and how to interpret the answers.
- Understand the presenting signs of a PVD and retinal detachment, know where to look and what techniques to use to look.
- Understand the management plan for PVD and retinal detachment.

3.4 Lecture 4 Dry eye in Optometric practice

A practice-based approach is used in this distance learning lecture presentation to assess and manage a patient presenting with dry eye. A review of the cornea and tears is presented with an evidence base. The lecture reviews the evidence about numbers of patients with dry eye, the causes of dry eye and treatment with therapeutic drugs and other treatments.

Learning objectives:

- Understand and put in to context the tear film and corneal anatomy and the evidence basis for tear film anatomy.
- Understand the causes and different sub-types of dry eye
• Understand the symptoms of dry eye
• Understand the presenting signs of dry eye and how to investigate the signs using specific techniques
• Understand the therapeutic and other treatment options for a patient with dry eye
• To be able to apply the knowledge learned in this module to how you would treat a patient with dry eye in practice

3.5 **Lecture 5**  **AMD Part 2**

This distance learning lecture reviews outlines NHS funded treatments available for AMD patients. It then goes on to outline the optometric management of AMD. This includes referral, prescribing, patient information an education and recall. Videos of the treatment procedures and case studies will enable practitioners to understand what will happen in the eye department including the assessment techniques and post treatment checks.

**Learning objectives**

• To be aware of the treatments currently available to patients with AMD
• To understand how to make the differential diagnosis of treatable and non-treatable AMD.
• To understand the referral pathways for AMD
• To understand other aspects of optometric management of patients with AMD including spectacle prescribing, patient education and information, referral for rehabilitation and recall.

3.6 **Lecture 6**  **The cornea and corneal foreign bodies**

A practice-based approach is used in this lecture presentation to assess and manage a patient presenting with a white lesion of the cornea or a superficial corneal foreign body. The lecture reviews the anatomy of the cornea and its unique defensive mechanism against microbes. A sign and symptoms approach to differentiating between an infected or non-infected corneal lesion is presented as well as useful techniques to aid differentiation and the management applicable to a PEARS registered optometrist in these circumstances. Superficial foreign bodies are presented in a similar way with particular emphasis on methods that are useful to manage superficial foreign bodies in practice.

**Learning objectives**

• Understand the anatomy and defensive capabilities of the cornea
• Understand the histological difference between an infected ulcer and a non-infected infiltrate
• Know 9 key points to help determine if a corneal lesion is infected or not
• Understand the management for infected and non-infected corneal lesions
• Know typical signs and symptoms of a superficial foreign body
• Understand acceptable practice-based methods of removing superficial foreign bodies

3.7 Lecture 7  Sudden loss of vision

Practice-based approach is used in this distance learning lecture presentation to assess and manage a patient presenting with sudden loss of vision in a white eye. The lecture aims to provide a guide to interpreting the signs and symptoms of different causes of a sudden loss of vision. Each likely cause of loss of vision is discussed with particular relevance to the signs and symptoms. Optometric management as applicable to a PEARS registered optometrist is outlined.

Learning Objectives
• Understand the typical signs and symptoms associated with a sudden loss of vision
• Know the commoner causes of sudden loss of vision
• Know what additional questions to ask a patient presenting with a sudden loss of vision and how to interpret the answers
• Understand the management options for the commoner causes of loss of vision
• Understand the management plan for sudden loss of vision in a PEARS and in particular those amenable to optometric management without the need for further referral.

4.0 Practical assessment

4.1 Format

The practical assessment is an Objective Structured Clinical Examination or OSCE. This is a type of examination used in medicine to test skills such as communication, clinical examination, and interpretation of results.

The OSCE consists of 5 stations. Each station lasts five minutes. It is held under invigilated conditions.

4.2 Content

Candidates are tested on the following skills:
• Data interpretation
• Clinical examination
- Patient management (acute and chronic conditions)
- Referral
- Communication

Conditions are drawn from those in the distance learning modules that they will have recently completed:

- AMD (wet and dry)
- Corneal conditions
- Corneal foreign bodies
- Retinal tears and detachments
- Posterior Vitreous detachments
- Red Eye
- Sudden loss of vision

4.3 The stations

The stations have been designed so that a practitioner should be able to demonstrate their competence in the station in 5 minutes.

Station 1 Volk BIO

Practitioners are required to demonstrate their ability to do indirect ophthalmoscopy. A model eye will be mounted on a slit-lamp; within the model eye there are words which practitioners must transcribe correctly.

Station 2 Structured Viva

Practitioners are required to interpret a variety of clinical data - this may include pictures, results of clinical examinations, clinical signs, or a video of a history and symptoms.

Station 3 Patient interaction

An actor plays the part of the patient. Practitioners are observed interacting with the patient. They may be required to:

- Explain a diagnosis, investigation or treatment
- Decide on appropriate management with a patient
- Break bad news
- Explain a diagnosis
- Involve the patient in the decision-making
- Deal with an anxious patient
- Give advice on lifestyle, health promotion or risk factors
Station 4  Structured Viva

A repetition of station 2 above

Station 5  Referral

Practitioners are required to interpret a variety of clinical data - this may include pictures, results of clinical examinations or clinical signs. Based on the data, they may be required to write a short report or a referral letter. Alternatively, they may be required to request an emergency referral. In this scenario the assessor acts as a casualty doctor on the other end of the phone.

5.0  Course Leaders

Nik Sheen passed the College of Optometrists professional pre-qualifying examinations in 1995. He worked as an optometrist in independent and multiple practices for 3 years before studying full-time in Bristol Eye Hospital for a taught MSc in Clinical Ophthalmology and Optometry. Thereafter, he completed a PhD entitled ‘The evaluation of stereoscopic imaging techniques in the detection of glaucoma’ at Cardiff University. He now works as a part-time lecturer in Optometric Investigative Techniques at Cardiff University. He also works part-time as the accreditation and evaluation manager for the Primary Eyecare Acute Referral Scheme (PEARS) and the Welsh Eye Health Examination (WEHE). He is also a College of Optometrists examiner, a member of the GOC education committee and a self-employed locum in an independent optometrist practice.

Barbara Ryan graduated from City University and spent her early optometric career in the Hospital Eye Service in Oxford, Birmingham and Nigeria. Barbara has been involved in clinical teaching on a part time basis for over 14 years in Aston, Bradford and Cardiff Universities. She has presented at conferences and local optometric meetings around the UK, mainly on low vision. In 2000 she won the Optician of the Year Award for her work in the field of low vision. Barbara took up her current position with the Welsh Assembly Government and Cardiff University in 2003. In this role she is responsible for training and accrediting practitioners who provide the Welsh Eyecare Initiative. Barbara continues to practice one day a week in Monmouth and is an Examiner for the College of Optometrists.

References