NHS Diabetic Eye Screening Programme

Slit lamp biomicroscopy examiner training and accreditation framework

Public Health England leads the NHS Screening Programmes
About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

Public Health England, Wellington House, 133-155 Waterloo Road, London SE1 8UG
Tel: 020 7654 8000   www.gov.uk/phe
Twitter: @PHE_uk   Facebook: www.facebook.com/PublicHealthEngland

About PHE Screening

Screening identifies apparently healthy people who may be at increased risk of a disease or condition, enabling earlier treatment or better informed decisions. National population screening programmes are implemented in the NHS on the advice of the UK National Screening Committee (UK NSC), which makes independent, evidence-based recommendations to ministers in the four UK countries. The Screening Quality Assurance Service ensures programmes are safe and effective by checking that national standards are met. PHE leads the NHS Screening Programmes and hosts the UK NSC secretariat.

PHE Screening, Floor 2, Zone B, Skipton House, 80 London Road, London SE1 6LH
www.gov.uk/topic/population-screening-programmes
Twitter: @PHE_Screening   Blog: phescreening.blog.gov.uk

Prepared by: Patrick Rankin
For queries relating to this document, please contact: phe.screeninghelpdesk@nhs.net

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Introduction

The NHS Diabetic Eye Screening Programme (NDESP) aims to reduce the risk of sight loss among people with diabetes through the early detection and treatment, if needed, of diabetic retinopathy. Screening using digital photography is offered every year to all eligible people with diabetes in England aged 12 and over.

This document describes the training and accreditation process for people who conduct slit lamp biomicroscopy (SLB) in NDESP.

Clinical leads of local diabetic eye screening (DES) services are responsible for ensuring all staff who perform a clinical role are appropriately trained, assessed for competence and reviewed regularly.

Slit lamp examiners (SLEs) should receive continuous feedback on their decisions, attend multidisciplinary team meetings and participate in the monthly national test and training sets.

Commissioners and programme boards should make sure this guidance is followed.

This guidance is based on the previously published document which followed a stakeholder meeting in 2012 to determine the most appropriate and practical framework for training SLEs within NDESP.
The slit lamp examiner

An accredited slit lamp examiner in NDESP can be one of the following.

1. An ophthalmologist who is prepared to feed back results to the screening programme in the required format. They must:
   - be a consultant, associate specialist, staff grade or specialist registrar year III or higher with at least one year’s experience of medical retina clinics
   - understand and follow the NDESP grading criteria

2. A grader who:
   - has completed the Diploma for health screeners qualification, including the ‘Detect retinal disease and classify diabetic retinopathy unit’ or has completed the previous City and Guilds diploma in diabetic retinopathy screening and must have completed:
     - Unit 3: Anatomy, Physiology and Pathology of the Eye and its Clinical Relevance
     - Unit 4: Preparing the patient for Retinal Screening
     - Unit 5: Measuring Visual Acuity and Performing Pharmacological Dilatation
     - Unit 7: Detecting Retinal Disease
     - Unit 8: Classifying Diabetic Retinopathy
   - is working within a local DES programme as a grader, grading at least 1,000 image sets per year
   - is fully participating in the monthly test and training sets
   - has completed the assessment/accreditation process described below

3. A qualified practicing optometrist registered with the general optical council (GOC). Optometrists registered with the GOC who are only undertaking SLB within NDESP need to complete the ‘Detect retinopathy and classify diabetic retinopathy unit’ of the Diploma for health screeners. These trainee SLB practitioners will not be able to complete the required 200 grading of images and should develop a suitable alternative assessment locally to satisfy this learning outcome.
Optometrists who have completed unit 7, Detecting retinal disease, and unit 8, Classifying diabetic retinopathy, in the previous City and Guilds qualification are exempt from taking additional units if undertaking SLB only. If optometrists are undertaking full disease grading within the local DES programme they must also complete the appropriate units for the roles they have within the screening programme as outlined within the rules of combination (Appendix 1).

Optometrists must:
- participate in the monthly test and training sets
- have completed the assessment/accreditation process described in this document
- understand and report SLB examinations using the NDESP grading criteria
Provision of training and assessment

Training can be provided by:

- an ophthalmologist who meets the requirements given in section 1
- a clinical optometrist with a recent minimum of 2 years’ experience working in medical retina clinics and approved by the local DES programme clinical lead
- an accredited SLE working in a medical retina clinic or similar dedicated clinic approved by the clinical lead

An SLB assessor should be an ophthalmologist who is either the clinical lead for the local DES programme or someone appointed by the clinical lead who meets the above requirements for an ophthalmologist.

The clinical lead for the DES programme is responsible for organising the SLB assessors.
Accreditation process

It is essential that candidates who are performing SLB examinations are fully observed in practice until accredited to ensure safe practice.

Level 1: preliminary training – supervised SLB examination technique

The local DES programme needs to determine a suitable number of supervised SLB examinations that the candidate must undertake in order to complete the level 1 preliminary training. This number will differ for each SLE candidate and should be determined locally depending on individual competency levels.

All level 1 examinations must be fully supervised.

The level 1 preliminary assessment can start when the assessor is satisfied that candidate is competent. The assessor must sign a completion certificate to confirm the training and assessment has been satisfactorily completed.

Level 1: preliminary assessment

The SLE candidate should demonstrate competence in SLB examination technique in the opinion of the assessor across SLB assessments on 10 patients with various stages of diabetic retinopathy and related common retinal disorders.

Assessment can take place over a number of clinics.

If the assessor is satisfied the SLE is already capable of performing SLB to the level 1 standard, they may be allowed to proceed directly to the level 2 assessment to demonstrate their competence.
Level 2: supervised grading of diabetic retinopathy and related disorders using SLB

This stage involves supervised grading of SLB examinations to identify diabetic retinopathy and related disorders as determined within the features based grading criteria within NDESP.

The period of training and number of supervised grading of SLB examinations should be determined locally and should be sufficient to ensure competency.

Level 2: final assessment

Following this period of supervision the level 2-final assessment can be undertaken when the SLB assessor considers the candidate is competent to be an accredited SLB examiner.

If the candidate is also undertaking full disease grading within NDESP the assessment should comprise a formal assessment of 10 patients with varying stages of diabetic retinopathy and related common retinal disorders performed over a single or multiple sessions.

If the candidate is not undertaking full disease grading within NDESP the assessment should comprise formal assessment of 20 patients with varying stages of diabetic retinopathy and related common retinal disorders performed over a single or multiple sessions.

The assessment should be documented and should use the nationally described features based grading criteria.

Successful completion of the level 2-final assessment should be documented within an internal database of accredited SLEs, and maintained by the local programme manager or clinical lead.

Candidates who fail the level 2-final assessment must return to a period of directly supervised training and retake the assessment.
Maintaining competency of SLB examiners

The competency of SLB examiners should be managed and evidenced locally.

SLE’s should undertake a minimum of 100 SLB examinations per annum to maintain competency.

The clinical lead for the programme is responsible for ensuring all SLEs within the local DES programme are appropriately trained, assessed for competence and reviewed regularly.

SLEs should receive continuous feedback on their decisions, attend multidisciplinary team meetings and participate in the monthly national test and training sets.

Clinical leads should have a formal assessment of SLB examiners once every 3 years. This is to ensure they maintain competency and the knowledge and skills to successfully undertake SLB within their local screening programme.

This planned formal assessment should include a peer-reviewed grading of diabetic retinopathy using SLB on at least 8 patients with an appropriate assessor.

Following this session a formal feedback session should be undertaken with the clinical lead and SLE and should include professional discussions regarding:

- performance and participation in monthly test and training sets
- number of SLB examinations and gradings performed each year
- feedback and subsequent reflective practice on performance during formal assessment

Following this formal feedback the clinical lead should maintain a record of the formal assessment and feedback session. Appendix 2 provides a proforma that local screening programmes can use to document the above requirements.

Undertaking monthly test and training sets

It is recommended best practice that all SLEs fully participate in the monthly test and training set, whether they are performing full disease grading for the local DES programme or not. This will mean SLEs will be included in the grading management reports which are used for monitoring grading performance. Guidance on how to use these reports can be found in appendix 1 of the ‘management of grading quality document’ on GOV.UK.
Local DES programmes may have additional eligibility, training and quality assurance criteria for SLEs. These additional requirements should be documented within local standard operating procedures.

As part of the ongoing Screening Quality Assurance Service (SQAS) external quality assurance process, local programmes may be required to submit evidence of training, competency and ongoing internal quality assurance. It is recommended local DES programmes maintain accurate and up to date records of accredited and trainee SLEs.
### Rules of combination table for Diploma for health screeners (diabetic eye)

<table>
<thead>
<tr>
<th>Units</th>
<th>Screener</th>
<th>Grader</th>
<th>Screener/grader</th>
<th>Optometrist</th>
<th>Assistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 mandatory units</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anatomy and physiology of the eye</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding diabetes and diabetic retinopathy</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Prepare for diabetic retinopathy screening</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Undertake diabetic retinopathy imaging</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detect retinal disease and classify diabetic retinopathy</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>role specific</td>
</tr>
<tr>
<td>Understand how to safeguard the wellbeing of children and young people</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Principles of health screening unit only.
Appendix 2

**Slit lamp biomicroscopy examiner record of competency**

This proforma should be used by local diabetic eye screening programmes to document the proficiency of slit lamp biomicroscopy examiners.

This form should be completed every 3 years and should be signed off by the local screening programme clinical lead.

<table>
<thead>
<tr>
<th>Name of SLE</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Screening programme</td>
<td></td>
</tr>
<tr>
<td>Clinical lead of programme</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td></td>
</tr>
</tbody>
</table>

**SLB examinations performed over last 36 months:**

<table>
<thead>
<tr>
<th>1-12months</th>
<th>13-24months</th>
<th>25-36months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Number of Test and Training sets taken over the last 36 months:**

<table>
<thead>
<tr>
<th>1-12months</th>
<th>13-24months</th>
<th>25-36months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Current Test and Training flag status**

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### Review of formal assessment

<table>
<thead>
<tr>
<th>Date of assessment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of assessor</td>
<td></td>
</tr>
<tr>
<td>Number of SLB examinations assessed</td>
<td></td>
</tr>
</tbody>
</table>

### Feedback section (use additional sheets if required)

#### Clinical Lead and assessor feedback

#### Reflective feedback from SLE

I am satisfied that __________________________ has achieved and maintained competence in slit lamp biomicroscopy.

Signed: __________________________

Date: __________________________

Name: __________________________

Screening programme: __________________________

Designation: **NDESP Clinical Lead**