External Quality Assurance Systems for Graders

Prof. Peter Scanlon MD FRCOphth FRCP DCH
- Programme Director
- English National Programme
Quality Assurance of Staff

To ensure that whole screening programme is provided by a trained and competent workforce

1. Staff accreditation
2. Evidence of ongoing CPD and EQA test sets
Standardising the grading of retinopathy

In 2009/10, English DESP introduced:

Monthly QA test sets for all (1500+) graders in 84 local screening sites.

Latest version provides 20 image sets per month.

The grading is lesion based it also provides feedback with more of a training element.

We have approximately 1100 graders per month taking this in the English programme.

Accessed via the internet
Question 1

Images to be assessed using only the revised DESP grading definitions and the Feature Based Grading form

Features

- Please select any DR features you can identify (N.B. not all features are activated but all are visible)

- No DR

- microaneurysm(s) *

- retinal haemorrhages

- venous loop

- any exudate in the presence of other features of DR

- any number of cotton wool spots (CWS) in the presence of other features of DR

- multiple dot haemorrhages > MSHs + 2 or 3

- intraretinal microvascular abnormality (IRMA)

- venous reduplication

- venous beading

- Stelle pre-retinal fibres + peripheral retinal scatter laser

- Stelle fibrous proliferation (disc or papillary) + peripheral retinal scatter laser

- Stable R2 features (feature based grading) + peripheral retinal scatter laser

- R1 features (from feature based grading) + peripheral retinal scatter laser

Your current selections of features indicate that this image represents: R0 M0
The notes below summarise your responses when compared to the Guide Grade.

Of the 3 urgent referrals, you recorded 3 (100 %) as urgent referral.

Of the 8 routine referral cases, you recorded 8 (100 %) as routine referral.

Of the 9 annual rescreen cases, you recorded 9 (100 %) as annual rescreen.

### Level of agreement Chart : Comparison with Guide Grade

**Guide Grade Level of Agreement**

<table>
<thead>
<tr>
<th>Grader: Peter Scanlon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Chart Date</strong></td>
</tr>
<tr>
<td>08/09/2013 17:39:43</td>
</tr>
<tr>
<td><strong>Comparison</strong></td>
</tr>
<tr>
<td><strong>Guide Grade</strong></td>
</tr>
<tr>
<td><strong>Level of Agreement</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grading Code</th>
<th>R0</th>
<th>R1M0</th>
<th>R1M1</th>
<th>R2M0</th>
<th>R2M1</th>
<th>R3M0</th>
<th>R3M1</th>
<th>R3aM0</th>
<th>R3aM1</th>
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<tbody>
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</tbody>
</table>

The above chart includes only responses for Test sets you have completed.
The chart displays how you responded when compared to the Guide Grade.
Seeing is Believing Grant
To develop an International version  $49,035.

<table>
<thead>
<tr>
<th>Project Objective (relate to 3.1 in application form)</th>
<th>Key Outputs/Deliverable</th>
<th>Timeframe for Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop, migrate and test new international domain site to support international TAT access</td>
<td>1.1 Redevelop and migrate software</td>
<td>Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec</td>
</tr>
<tr>
<td></td>
<td>1.2 IP Licensing by Gloucestershire Hospitals Trust</td>
<td></td>
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<tr>
<td></td>
<td>1.3 Develop Clinical Content</td>
<td></td>
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<tr>
<td></td>
<td>1.4 Web hosting, backup and storage</td>
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<td></td>
<td>1.5 Review and validate clinical content</td>
<td></td>
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<tr>
<td></td>
<td>1.6 Test and validate site</td>
<td></td>
</tr>
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<td></td>
<td>1.7 Provide management Reports &amp; User Feedback</td>
<td></td>
</tr>
<tr>
<td>2. Support and provide on-line / email access helpdesk to international TAT users</td>
<td>2.1 Set up Helpdesk for international pilot</td>
<td>Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec</td>
</tr>
<tr>
<td></td>
<td>2.2 Provide continuing access to Helpdesk for TAT users</td>
<td></td>
</tr>
<tr>
<td>3. Develop training packages for pilot programmes</td>
<td>3.1 Develop on-line learning support material</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.2 Provide support for pilot sites</td>
<td></td>
</tr>
<tr>
<td>4. Ascertain whether there is a necessity to translate user manuals</td>
<td>4.1 Develop &amp; distribute Questionnaire to assess understanding of English Manuals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.2 Assess Questionnaire responses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.3 If required, translate User Manuals max 3 languages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.4 If required, back-translate User manuals to English</td>
<td></td>
</tr>
<tr>
<td>5. Monitor test scores of graders</td>
<td>5.1 Monitor scores and produce individual reports after each monthly test set</td>
<td></td>
</tr>
</tbody>
</table>

Please shade months required for activity and highlight months where feedback is being sought.
International Test and Training Creation

The creation of a non-English language version of the Test and Training System
International Test and Training Creation

A mechanism was required that enabled the translator to translate the system efficiently and reliably.

Removed English from the Logo
International Test and Training Creation

Every link, heading and button was modified so that it could display either the English, or a translated version of the text
International Test and Training Creation

A configuration system was created to enable the translator to simply record the translations for all the main links, headings and buttons on the system.
International Test and Training Creation

Large pieces of text were translated by the translator using the online content editor.

The whole system was then proof read by another Mandarin language speaker and final minor modifications were made.
International Test and Training Creation
International Test and Training Creation

![Password Reset Form]

如果您不记得您的用户名，或者不确定您的电子邮件地址，请联系 helpdesk@netsima.co.uk
International Test and Training Creation
Seeing is Believing sites:

Botswana – Tunde Peto Moorfields

• Staff member Peter Blows, is going to Botswana to do more training second part of May

• For the new Botswana users, we have created 10 user accounts, at this stage registered as Trainee with access only to the Training (not Test) elements of TAT.
Bangladesh and Indonesia – Mahi Muqit from Moorfields

- Mahi plans to travel to Indonesia again in May/June
- For the Bangladesh Programme users, who took part in the original pilot we have given access to active monthly Test sets (as well as training sets).
- For the new Indonesia users, we have created 10 user accounts, at this stage registered as Trainee with access only to the Training (not Test) elements of TAT.
Qualifications in diabetic retinopathy screening

Competence framework
National Occupational Standards
Qualifications in Diabetic Retinopathy Screening
Accreditation / awarded by City & Guilds

- Choice of 5 qualifications (2 Diplomas, 2 Certificates & 1 Award), dependant on candidate’s professional role
- 9 modules, mixed selection to create the various qualifications
International Undergraduate Certificate in Diabetic Retinopathy Screening

University of Gloucestershire

- On line distance learning
- Developed the learning outcomes.
- Has been approved by the University of Gloucestershire
- 18-20 screeners from the National Screening Programme in Ireland commence in May 2014 & 1 person from New Zealand

Certificate of Higher Education
Diabetic Retinopathy Screening

A new University-validated course and qualification will soon be available to staff working in diabetic retinopathy (DR) screening around the world. The Certificate of Higher Education in Diabetic Retinopathy Screening has been developed by Gloucestershire Hospitals NHS Foundation Trust and is validated and awarded by the University of Gloucestershire. The distance learning delivered course and award, supported by clinical and educational experts, has been developed for staff working in DR screening programmes without access to a qualification.

Certi HE in Diabetic Retinopathy Screening is coming your way!

Key features:
- University-validated course & award
- 120 CAT points at level 4
- 24/7 access to web-served distance learning (no Time Zone issues)
- Modular course structure with guided self-learning
- Feature-based retinopathy learning
- Local practical skills assessments
- Access to clinical & education experts
- Completion within one year

Course structure and content:
The Level 4 Cert HE award comprises 5 modules:
- HS4301 An introduction to the Study of Diabetic Retinopathy: 15 CAT
- HS4302 Diabetic eye screening programmes, processes and protocols: 15 CAT
- HS4303 Preparing the patient for diabetic eye screening: 30 CAT
- HS4304 Performing retinal screening: 30 CAT
- HS4305 Assessing retinal images: 30 CAT

Student learning is through web-served course content and guided further study. Sequential learning and assessment methods include structured ‘quizzes’ and reflective learning, multiple-choice exams and locally observed practical skills assessments.

All enquiries via email contact: drsadministrator@glos.nhs.uk
Course structure and content:
The Level 4 Cert HE award comprises 5 modules:

<table>
<thead>
<tr>
<th>Module</th>
<th>Title</th>
<th>CAT</th>
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<tbody>
<tr>
<td>HS4301</td>
<td>An introduction to the Study of Diabetic Retinopathy</td>
<td>15</td>
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<tr>
<td>HS4302</td>
<td>Diabetic eye screening programmes, processes and protocols</td>
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<td>HS4303</td>
<td>Preparing the patient for diabetic eye screening</td>
<td>30</td>
</tr>
<tr>
<td>HS4304</td>
<td>Performing retinal screening</td>
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</tr>
<tr>
<td>HS4305</td>
<td>Assessing retinal images</td>
<td>30</td>
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All enquiries via email contact: dresadministor@glos.nhs.uk
Costs

• £1500 (2479 USD) split between University & GHNHSFT

• Costs in development for GHNHSFT – distance learning web platform alone £15,000 (24,790 USD) – need 30 students to recover this cost alone

• Need to work out a way of providing an International qualification at a cost that is affordable for trainees and for us to provide it.
Thank you for inviting me to speak and for listening