



The English Diabetic Eye Screening Programme

- training, accreditation and maintaining grading standards

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Programme Director

English National Programme



English National DR Screening Programme

2002 – 8 reasonable quality services



5/8 shown

2012

84 centres

2.6 million with diabetes

2.4 million offered

1.9 million actually screened

Increase 121,000 in 12 months



84

Annual cost
approx
90 million US dollars

Outcome measure: Presence of lesions that are 2-D photographic markers

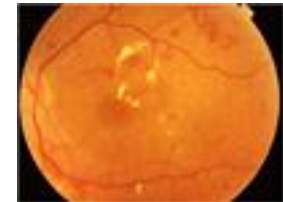
Retinopathy progresses with increasing ischaemia

R grade

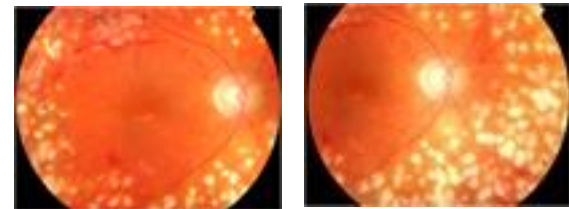


Leaks occur in the macular area

M grade



The treated patient is more difficult to grade
Presence of photocoagulation scars P grade



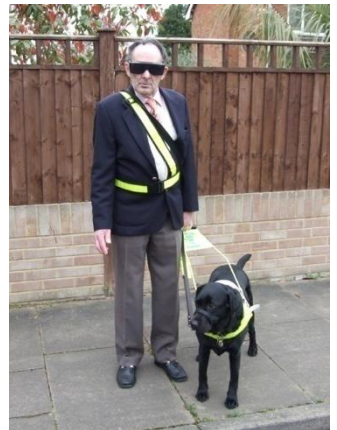
Current English Programme referrals

Screening 1.9 million

- Referred from the English DESP: 7.6%
- 5.6% M1 - Macular lesions (not the same as Maculopathy or CSMO).
 - 100,800 ref in England per annum.
 - Estimates 20 - 40% = CSMO
- 0.74% R3 proliferative (PDR) - 14,000 ref in England per annum
- 1.2% R2 pre-proliferative
- 3.6% ungradable – require slit lamp biomicroscopy

Quality Assurance

1. Reduce the probability of error and risk
2. Ensure that errors are dealt with competently and sensitively
3. Help professionals and organisations improve year on year
4. Set and keep under review national standards;
5. Manage these processes.

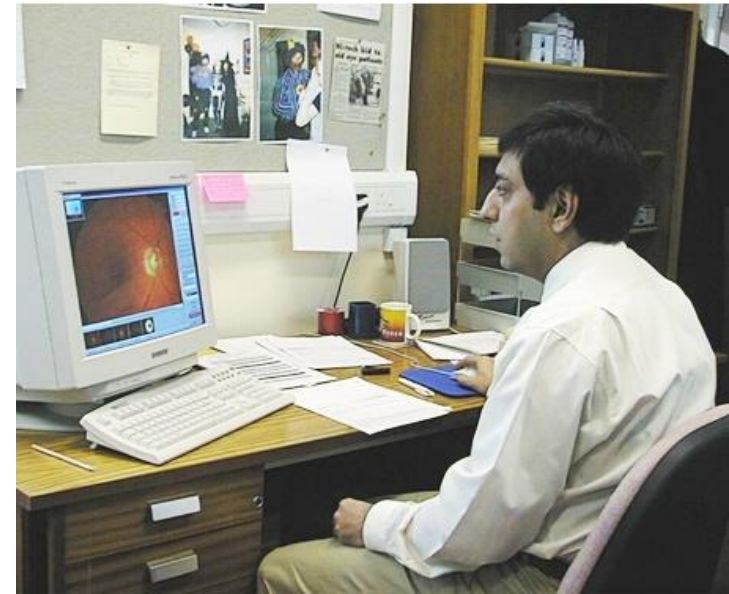


Staff

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



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



Standardising the grading of retinopathy

In 2009/10, English DESP introduced:

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

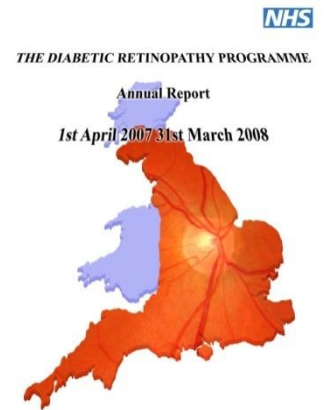
Latest version provides 20 image sets per month.

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



Accessed via the internet at their own place of work or from home



Level of Agreement [Export to Excel »](#)

Grader: 734 Block 0

	R0	R1M0	R1M1	R2M0	R2M1	R3M0	R3M1
R0	41	5	1	0	0	0	0
R1M0	3	78	11	2	0	1	1
R1M1	0	2	38	0	2	0	0
R2M0	0	5	0	31	0	4	0
R2M1	0	2	8	0	8	0	0
R3M0	0	2	0	4	0	17	1
R3M1	0	0	0	4	3	2	24

Not referred:
11/157 (7.0%)

Exact:
235/300 (79%)



Online Test and Training

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- Contact Us
- Further Information
- Before you start

Login

Please enter your username and password below

Username **Password**

[Login »](#)

Please note: If you have forgotten your password, or your details are not recognised, please use the link at the bottom of this screen to reset your password.

Please read the blog!

Last updated : Wednesday July 24th 2013 09:15

Reset Your Password

[Reset Your Password »](#)

Passwords are encrypted on this system

This means that the administrators are not able to retrieve them for you. If you have forgotten your password, please click the link above, enter your email address and username, and a new password will be sent to your email address. You may use this to login then you are free to change it to anything you prefer once you have logged in.

If you cannot remember your username, or you need any other assistance, please contact helpdesk@netsima.co.uk

Scheduled System Downtime

The system will be closed for 2 hours between 8 p.m. and 10 pm on the first Wednesday of every month in order to carry out essential maintenance.



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Alternatively, please click [here](#) to email the System Administration team for assistance.

- Full disease grader
- Arbitration grader
- Gloucestershire ACL
- Oxfordshire ACL



Snellen (metre) conversion chart is now available on the site on the Help Page - or click the button on the top menu to view the chart.

- Logout
- Home
- Conversion Chart »
- Revised English Grading Definitions »

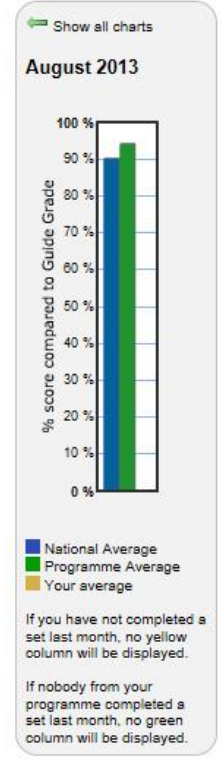
Take Test Set

Click Take Test Set to begin. You may save your attempt at any time and return to finish it when you wish.

Year 4 - 2013 - 2014

Take Test Set

Images are extracted from programme databases using a National extraction tool and ground truthed by the National Grading College

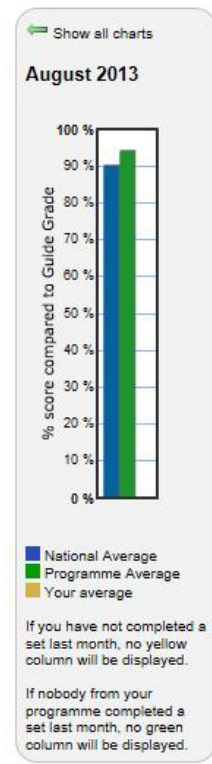


Online Test and Training

!! You have not yet read the following article
Visual Acuity equivalents

All visual acuities shown in the on-line EQA test set are given as logMAR values. A simple logMAR to/from Snellen (metre) conversion chart is now available on the site on the Help Page - or click the button on the top menu to view the chart.

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Please record a response to all the questions on the right - there is no time limit.

Click the link on the left hand menu to download the Revised English Grading Definitions

★ If you have not already done so, please click [here](#) and read these notes before you continue.

❗ For guidance, please use the User Guide Section from the top menu - you can click that without losing your place on the training set.



💬 For other users' comments, and to record your own feedback, please use the Bulletin board. You can also click that without losing your place on the training set.

★ Click on any of the images to open them full sized in a new window.

QUESTION 1 OF 20

Question1

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

Macular image Nasal image

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 haemorrhage(s)
- 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 blot haemorrhages > MBH stds 1 2 or 3
- intraretinal microvascular abnormality (IRMA)
- venous reduplication
- venous beading
- Stable pre-retinal fibrosis + peripheral retinal scatter laser
- Stable fibrous proliferation (disc or elsewhere) + peripheral retinal scatter laser
- Stable R2 features (from feature based grading) + peripheral retinal scatter laser
- R1 features (from feature based grading) + peripheral retina scatter laser

Your current selections of features indicate that this image represents :
R0 M0



TAT cases and the National Grading College

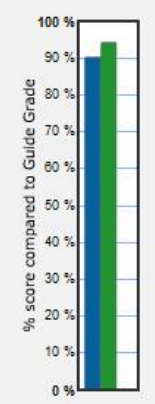
Since start of year 2012-13, all TAT cases have been selected following "3 of 3" agreement by members of the National Grading College.

!! You have not yet read the following article

- Logout
- Home
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- Revised English Grading Definitions »

Show all charts

August 2013



■ National Average
■ Programme Average
■ Your average

If you have not completed a set last month, no yellow column will be displayed.

If nobody from your programme completed a set last month, no green column will be displayed.

- Stable R2 features (from feature based grading) + peripheral retinal scatter laser
- R1 features (from feature based grading) + peripheral retina scatter laser

- new vessels elsewhere (NVE)
- new vessels on disc (NVD)
- pre-retinal or vitreous haemorrhage
- pre-retinal fibrosis
- tractional retinal detachment
- Reactivation in a previous stable R3s eye

- No referable Maculopathy
- any microaneurysm or haemorrhage within 1 disc diameter (1DD) of the centre of the fovea if associated with a best VA of $\leq 6/12$ where the cause of the reduced vision is known and not diabetic macular oedema
- exudate within 1DD of the centre of the fovea
- group of exudates $\geq 1/2$ DA within the macula
- any microaneurysm or haemorrhage within 1DD of the centre of the fovea only if associated with a best VA of $\leq 6/12$ (0.30 logMAR) (if no stereo)
- retinal thickening within 1DD of the centre of the fovea (if stereo available)

- No evidence of previous photocoagulation
- focal/grid to macula or peripheral scatter

Comments:

[Record my responses »](#)
[End my set for now »](#)

Your current selections of features indicate that this image represents :
R0 M0

Peter Scanlon Screen : 1
Macular image Visual Acuity : 0.00

TOOLS

show/hide Fovea and disc
 Grayscale Red
Free Green

Image Filters



reset sliders undo last action apply to main Image

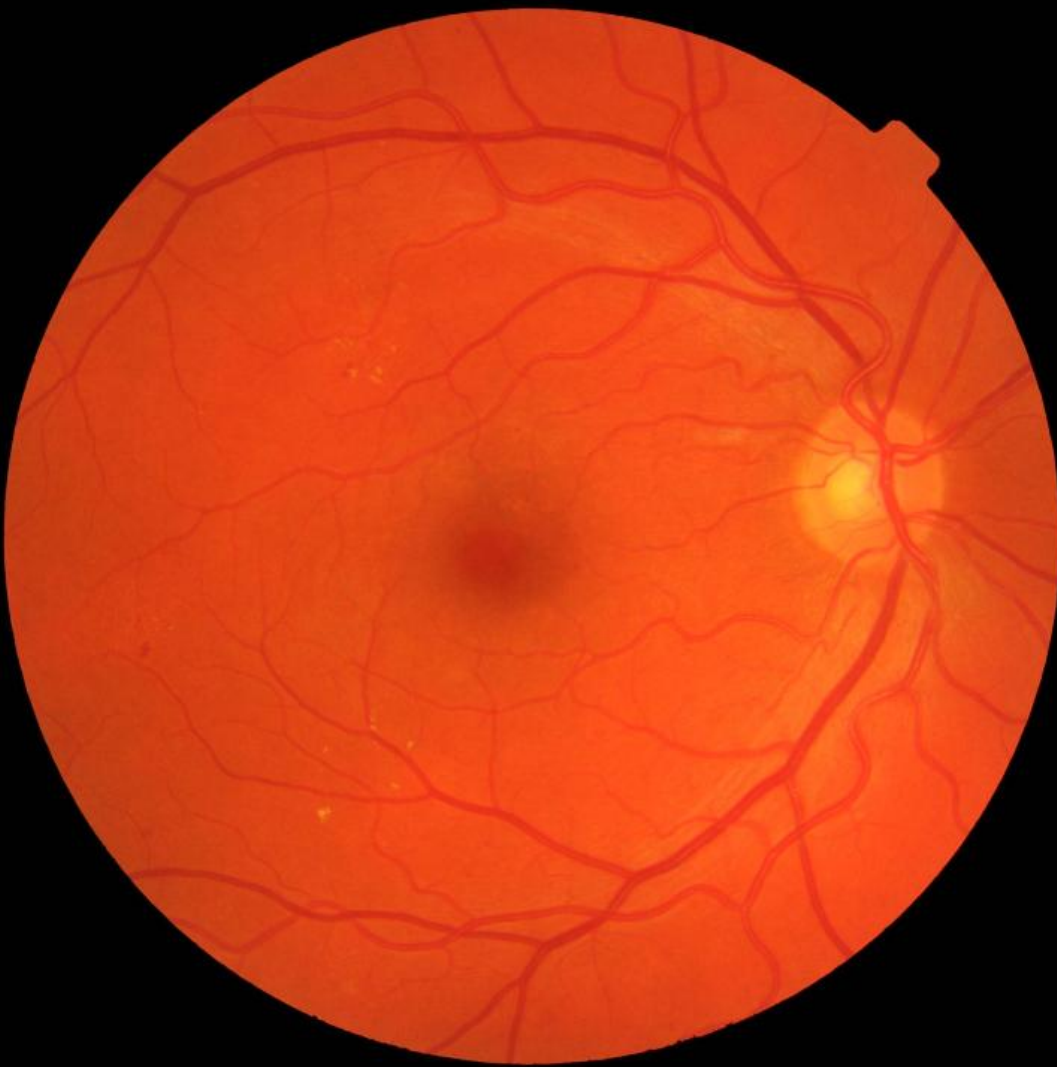
Grid Opacity



Peter Scanlon Screen : 1
Macular image Visual Acuity : 0.00

TOOLS

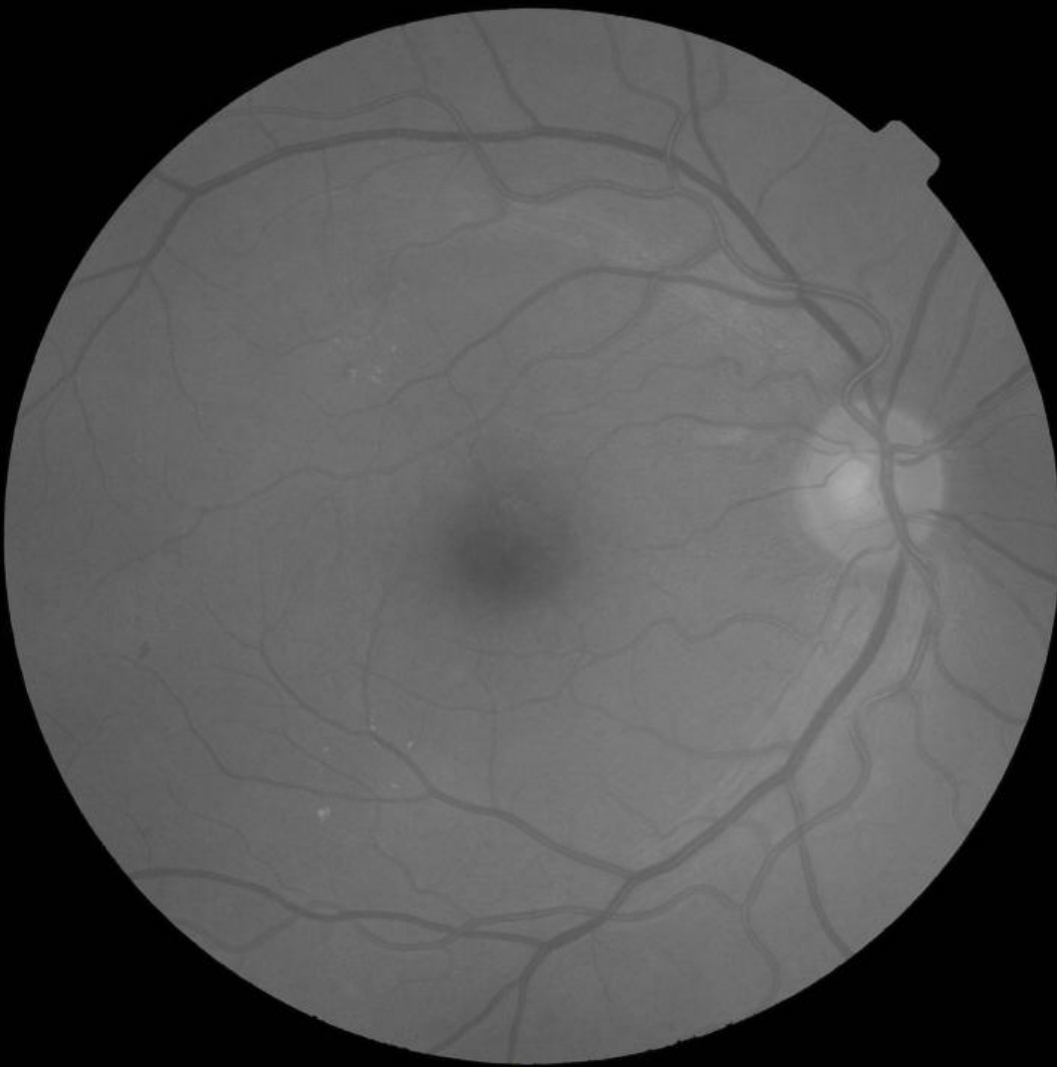
- show/hide Fovea and disc
- Grayscale Red
- Free Green



 **Peter Scanlon** Screen : 1 
Macular image **Visual Acuity : 0.00**

TOOLS

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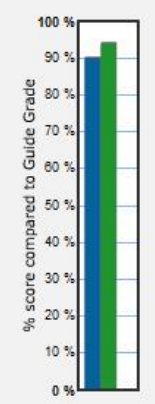


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- retinal thickening within 1DD of the centre of the fovea (if stereo available)

Your current selections of features indicate that this image represents :
R1 M1



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- My details
- My Notes
- FAQs
- User Guides
- News
- Bulletin Board
- Blog
- Helpdesk

- Logout
- Home
- Conversion Chart »
- Revised English Grading Definitions »

Responses Recorded . . .

Your responses have been recorded

Please click either of the buttons below to continue

If no buttons are visible, please log out and then re login to continue

- Continue with the set »
- End my set for now »

Show all charts

August 2013

Category	% score compared to Guide Grade
National Average	~90%
Programme Average	~95%
Your average	Not visible

If you have not completed a set last month, no yellow

Peter Scanlon Screen : 6
Macular image Visual Acuity : 0.44

TOOLS

- show/hide Fovea and disc
- Grayscale Red
- Free Green



  Peter Scanlon Screen : 6
Nasal image Visual Acuity : 0.44

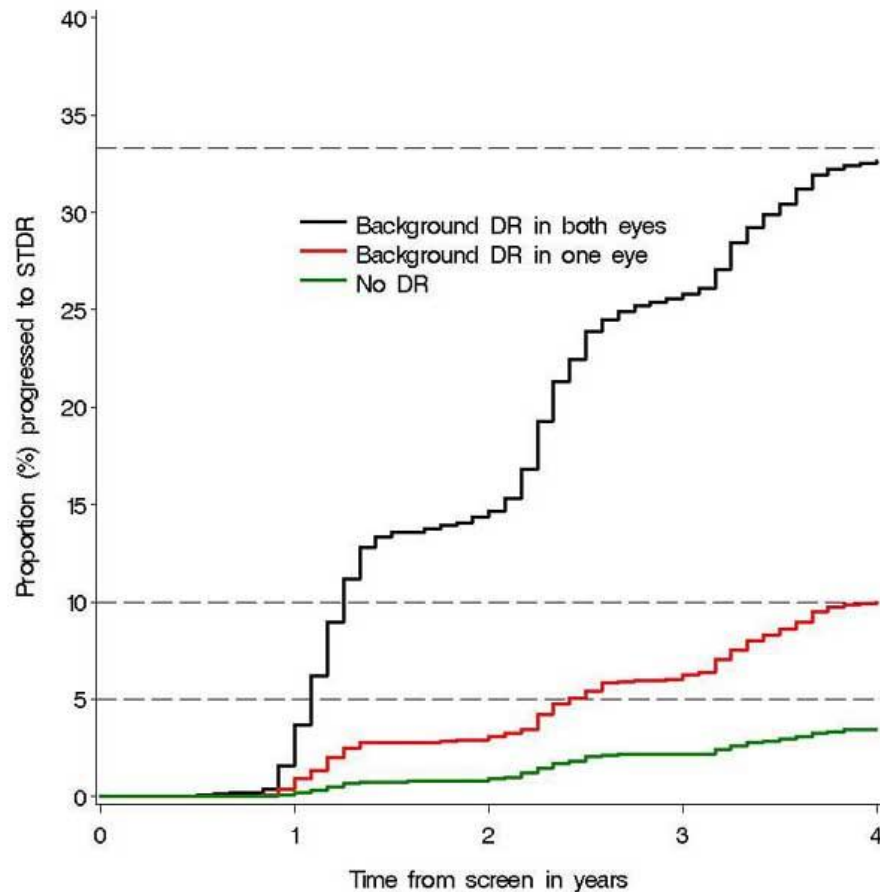
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Scanlon P.H. Stratton I.M. Histed. M. Chave S.J. Aldington S.J. The influence of background diabetic retinopathy in the second eye on rates of progression of diabetic retinopathy between 2005 and 2010. *Acta Ophthalmol.* 2013 Apr 1. doi: 10.1111/aos.12074. [Epub ahead of print]

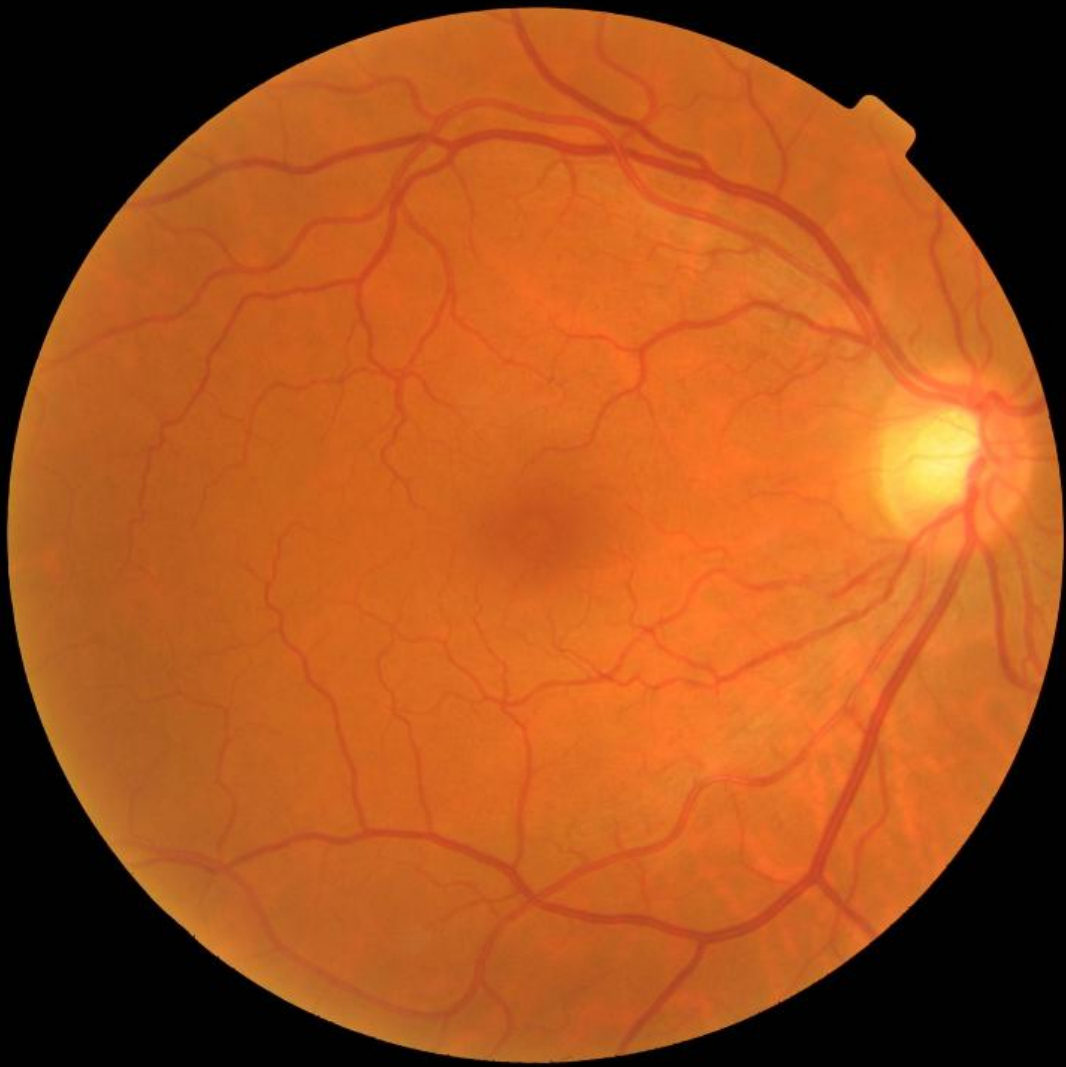
Time to referable DR
from screen with no referable DR
following one screening episode



Peter Scanlon Screen : 13
Macular image Visual Acuity : 0.

TOOLS

- show/hide Fovea and disc
- Grayscale Red
- Free Green



Peter Scanlon Screen : 13
Nasal image Visual Acuity : 0.


TOOLS

- show/hide Fovea and disc
- Grayscale Red
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Peter Scanlon Vote Here Grading Standards

Online Test and Training



- Logout
- Home
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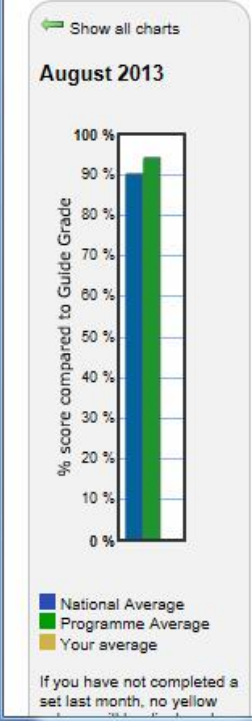


Image Set Complete

Congratulations - you have completed the image set
You have scored 39 out of 40 - 98 %

[Finish »](#)

If this button does not respond, you may simply log out using the link on the left

The score is against an agreed grade allocated by 3 experienced graders in the National Grading College.

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

Peter Scanlon 08/09/2013 : 17:39:43

Guide Grade Level of Agreement

Grader: Peter Scanlon

Guide Grade	R0	R1M0	R1M1	R2M0	R2M1	R3M0	R3M1	R3aM0	R3aM1
R0	4	0	0	0	0	0	0	0	0
R1M0	0	5	0	0	0	0	0	0	0
R1M1	0	0	5	0	1	0	0	0	0
R2M0	0	0	0	0	0	0	0	0	0
R2M1	0	0	0	0	2	0	0	0	0
R3M0	0	0	0	0	0	0	0	0	0
R3M1	0	0	0	0	0	0	0	0	0
R3aM0	0	0	0	0	0	0	0	1	0
R3aM1	0	0	0	0	0	0	0	0	2

The above chart includes only responses for Test sets you have completed

The chart displays how you responded when compared to the Guide Grade.



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- Full disease grader
- Arbitration grader
- Gloucestershire ACL
- Oxfordshire ACL

Gloucestershire

Year 4 2013 - 2014

Show completed sets only

Test Set

Show names on reports

Please note: Although ticking this box will display the names on screen, for security reasons they will NOT be included in the excel spreadsheets.

- All periods
- 01/04/2013 - 30/04/2013
- 01/05/2013 - 31/05/2013
- 01/06/2013 - 30/06/2013
- 01/07/2013 - 31/07/2013
- 01/08/2013 - 31/08/2013

Select a Grader from below

- Display ONLY non-Trainee scores
- Display Trainee and non-trainee scores
- Display ONLY Trainee scores

Administration:	Programme Overview »	Attempts Summary »	Grader Participation »	Attempt Diary »
			Grader Participation (Advanced) »	
Statistical Information	Table of responses »	Statistics chart (Guide Grade) »	Lesion statistics »	Guide Grade Level of Agreement »
		Statistics chart (National peers) »	Lesion report »	National Level of Agreement »
		Statistics chart (Programme peers)		Programme Level of Agreement »

Programme Level of Agreement

Year 4 - 2013 - 2014

Programme Level of Agreement

		Grader: All Graders								
		R0	R1M0	R1M1	R2M0	R2M1	R3M0	R3M1	R3aM0	R3aM1
Programme Peer Grade	R0	327	21	1	0	0	0	0	0	0
	R1M0	33	391	9	13	2	0	0	2	0
	R1M1	0	7	101	0	7	0	0	0	2
	R2M0	1	18	0	62	7	0	0	4	0
	R2M1	0	1	18	1	88	0	0	0	3
	R3M0	0	0	0	0	0	0	0	0	0
	R3M1	0	0	0	0	0	0	0	0	0
	R3aM0	0	7	0	8	0	0	0	106	10
	R3aM1	0	0	3	0	6	0	0	3	38

Oxfordshire

Year 4 2013 - 2014

Show completed sets only

Test Set

Show names on reports

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All periods
 01/04/2013 - 30/04/2013
 01/05/2013 - 31/05/2013
 01/06/2013 - 30/06/2013
 01/07/2013 - 31/07/2013
 01/08/2013 - 31/08/2013

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- Display Trainee and non-trainee scores
- Display ONLY Trainee scores

Administration: [Programme Overview »](#) [Attempts Summary »](#) [Grader Participation »](#) [Attempt Diary »](#)

Statistical Information: [Table of responses »](#) [Statistics chart \(Guide Grade\) »](#) [Grader Participation \(Advanced\) »](#) [Lesion statistics »](#) [Guide Grade Level of Agreement »](#)

[Statistics chart \(National peers\) »](#) [Lesion report »](#) [National Level of Agreement »](#)

[Statistics chart \(Programme peers\) »](#) [Programme Level of Agreement »](#)

Guide Grade Level of Agreement

Year 4 - 2013 - 2014

Guide Grade Level of Agreement

		Grader: All Graders									
		R0	R1M0	R1M1	R2M0	R2M1	R3M0	R3M1	R3aM0	R3aM1	
Guide Grade	R0	182	17	0	5	0	0	0	1	0	
	R1M0	17	212	2	13	2	0	0	3	0	
	R1M1	1	6	77	0	5	0	0	0	1	
	R2M0	0	3	0	15	1	0	0	2	0	
	R2M1	0	1	9	3	46	0	0	1	10	
	R3M0	0	0	0	0	0	0	0	0	0	
	R3M1	0	0	0	0	0	0	0	0	0	
	R3aM0	0	4	0	8	0	0	0	59	6	
	R3aM1	0	0	1	0	1	0	0	5	21	

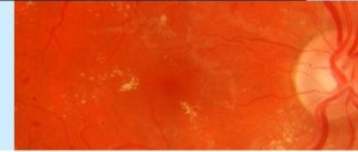
Gloucestershire Diabetic Eye Screening Programme

Grader Feed Back



Graders 1 2012 (1st April 2012 to 30th June)

Grader 320



Reporting Period Quarter 1 2012 (1st April 2012 to 30th June)

During this quarter you completed the test and training set 3 times and within the time period your average score was 94% This score is only a small part of the equation as a grader could potentially down grade an R3 image to R0 and still achieve a score of 98%.

Whilst no patients are placed at risk within the test and training system, this type occurrence could, within a real life screening scenario, place a patient's eye sight at risk. Therefore it is important that the finer detail, included below is analysed as it will highlight any areas of weakness and with the assistance of the clinical lead, programme manager or other suitably trained individual, further training can be performed.

The scores for each retinopathy and maculopathy grade for the entire quarter is as follows:-

R0

You correctly identified 11 out of a total number of 12 this equates to a score of 89%

R1

You have correctly identified 25 out of a total 28 this equates to a score of 89%

R2

You have correctly identified 13 out of a total 13 this equates to a score of 85%

R3

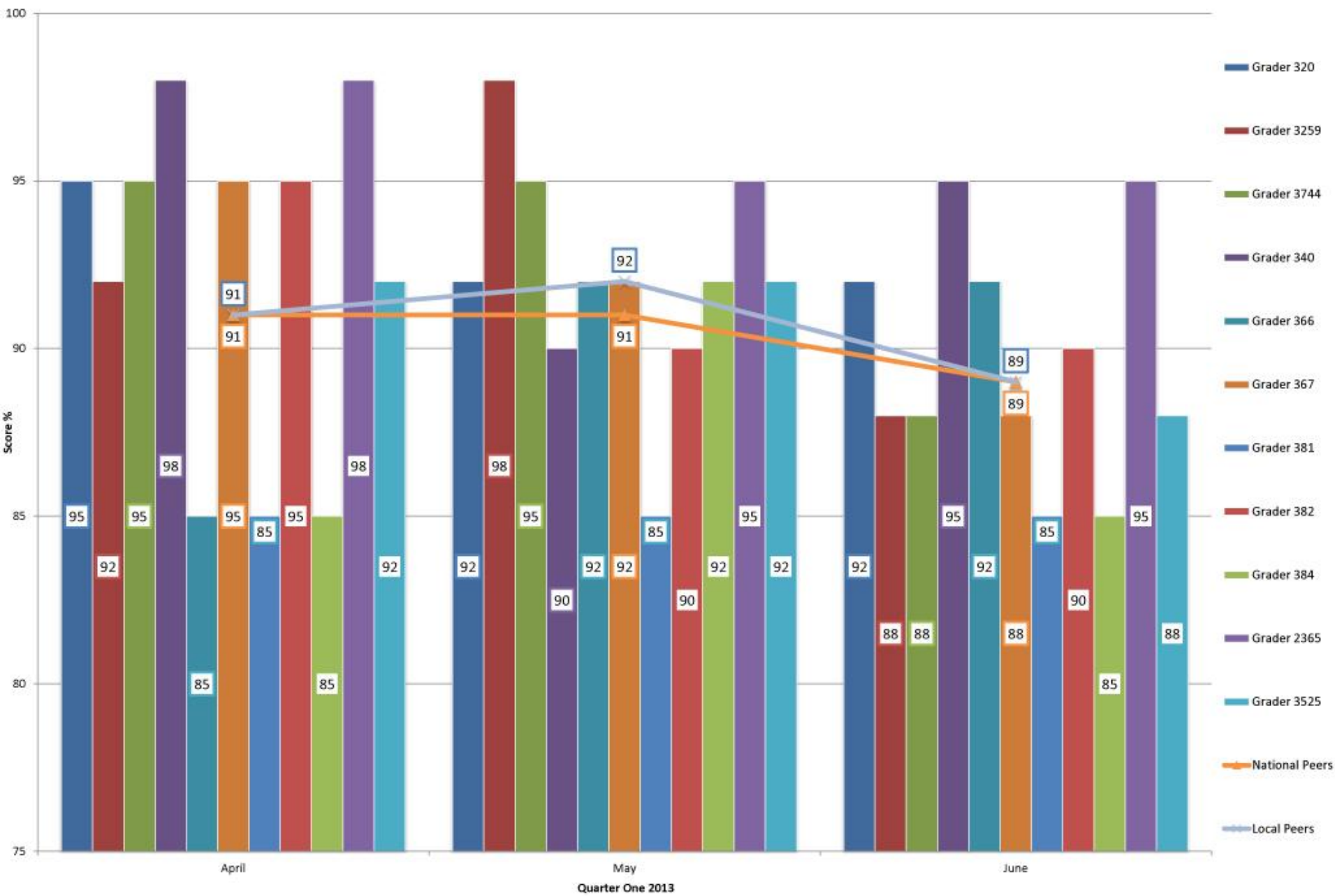
You have correctly identified 5 out of a total 7 this equates to a score of 71%

M0

You have correctly identified 40 out of a total 40 this equates to a score of 100.00%

M1

You have correctly identified 20 out of a total 20 this equates to a score of 100.00%



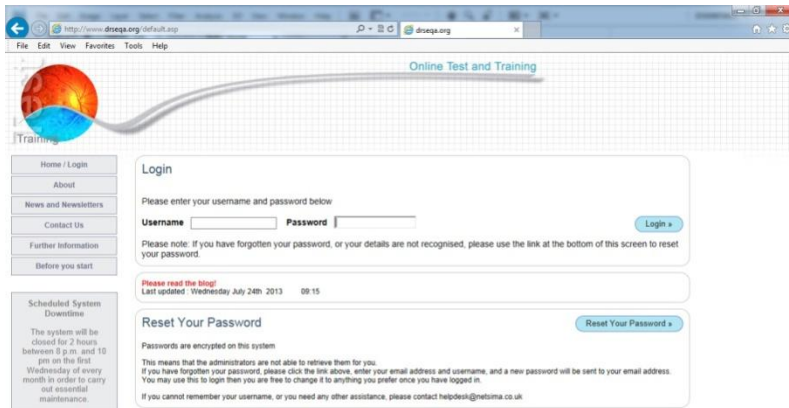
International Undergraduate Certificate in Diabetic Retinopathy Screening

Gloucestershire Framework Personal and Professional Development				
	Compulsory	Employment- and/or subject-related content	Compulsory	Level
Masters	Graduate research skills	Determined by negotiation with employers and/or learners	Action research	7
Honours	Research skills		Approaches to Action research	6
Intermediate	Investigative skills		Reflective Practice & PDP	5
Certificate	Introduction to study		Self-appraisal & PDP	4
Foundation	Preparation for HE	Negotiated content of potential endorsed certificate delivered by partners	PDP	3

University of Gloucestershire

- On line distance learning
- Have developed the learning outcomes.
- Currently going through the University approval process

International Version of Test and Training



- International domain site to support all international TAT access.
- Support and provide on-line / email access helpdesk
- Develop training packages that is targeted on the results.
- Ascertain whether there is a necessity to translate user manuals into languages other than English.