## Diabetic Retinopathy Screening (DRS) - EQA Results for NHS ------Outliers Action Plan

Immediate action for outliers where sensitivity <70%			
ACTION	WHO RESPONSIBLE	OUTCOME/COMMENT	
Follow the Scottish Diabetic Retinopathy Screening Programme escalation procedures, and decide the level of risk	DRS Lead Clinician	Red/Amber/ (?) The findings will decide the level of risk	
Obtain the results of the EQA and find out whether the problem is with the sensitivity or specificity of the grader's performance, or both	DRS Lead Clinician		
Verify that the results are indeed correct and not an error of the EQA system	DRS Lead clinician	Verify with EQA provider (KG)	
Determine what acceptable sensitivity and specificity levels are for EQA in the Scottish DRS Programme Agreement needs to be met by the DRS Collaborative as to the acceptable percentage for specificity/sensitivity	DRS Lead Clinician	70% minimum target for sensitivity	
In relation to a Level 1/2 grader:			
Consider stopping grading of DRS images – both of own and level 1/2 grading of other areas.	Board Coordinator		
Consider stopping slit lamp examination (SLE) – refer patients for SLE to an alternative resource	Board coordinator		
Consider if the grader can continue as a level 1/2 grader with images checked by another Level 2 grader	Board Coordinator		

Consider if the grader can continue sending patients to ophthalmology if referable retinopathy detected	Board Coordinator	
Check if Level 1/2 grader grades images for other board areas	Service manager	
Review previous EQA performance from previous rounds	Board Coordinator/Service Manager	
Decide how far back any patient review should go	Board Coordinator/ Service Manager/Clinical Lead	Possibly back to date when previous successful EQA round
Determine no. of patient images requiring review – both as an individual grader (for own work) and as a level 1/2 for other people's work	Board Coordinator/ Service Manager	Provide total number of images and a breakdown of own work and that of others
Decide which patients need to be reviewed (if any) and request a Soarian report based on requirements	Service Manager/ Board Coordinator/ DRS System Specialist	SQL report provided by system specialist which is built to provide the patient key list used to locate relevant images
Decide on the total numbers of patient images to review. (X)	Service Manager/ Board Coordinator/ Lead Clinician	
Estimated time involved in reviewing images (estimate 2.55 minutes per patient from a previous audit). For (X) see above patients, this will take X times 2,55 minutes = Y hours. Decide who will undertake the process of reviewing the images (e.g. This process will be undertaken by a level 3 grader and two	Lead Clinician/ Service Manager/Board Coordinator	It is expected that all images will have been reviewed by?? (Estimated date).

level 2 graders)		
Decide on the priority of the review i.e. (It has been decided that this process should be undertaken as quickly as possible). If any outliers are found then the priority level is high for the board to act decisively.	Board Coordinator	
The following representatives should be contacted with details of action plans and proposed timescales-		
Board Director of Public Health DRS Coordinator (who will coordinate responses/follow up to the following parties) NSD Scottish Government representative		
Determine the reasons for the poor EQA results and any potential solutions (e.g. rushed/left to the last minute/person took unwell)	Service Manager /Board Coordinator / Lead Clinician in consultation with grader involved	
<ul> <li>Decide if the grader can be reinstated and if so when. This can only happen if the grader can demonstrate that they can undertake grading as a level 1/2 grader. To facilitate this, the grader will be encouraged to: <ul> <li>View their image results from the previous EQA and learn from them</li> <li>Meanwhile function as a level 1/2 grader with reduced responsibilities and cease other grading work until satisfactory sensitivity is achieved</li> </ul> </li> </ul>	Board Lead Clinician/DRS Lead Clinician	
<ul> <li>If they do not show evidence of suitable improvement, provide personalised targeted training (if necessary)</li> <li>If no improvement, consider if they should cease to be a level 1/2 Grader.</li> </ul>		

Agree and adapt this draft Action Plan with the local DRS Service Manager and the local DRS Lead Clinician, Include the DRS Collaborative, Lead Clinician, and DRS Coordinator in formalising plan.	Board Coordinator	<ul> <li>Formalise action plan with Lead Clinician and Service Manager</li> <li>Finalised draft prepared including in it responses to comments from all of the above people.</li> <li>Finalised plan to be sent to NSD/DRS Collaborative (Scottish Government representative?)</li> </ul>
In relation to the Grader concerned:	Lead Clinician/ Service Manager	
Draw the results of the EQA to their attention, if not already aware of it		
Encourage the person to learn from them	Lead Clinician/Service Manager	
Can they continue as a level 1/2 grader with images checked by a Level 2/3 grader?	Lead Clinician/ Board Coordinator /Service Manager	
Can they continue sending patients to ophthalmology if referable retinopathy detected?	Board Coordinator/ Lead Clinician	
Measurable success criteria for resolution of the problem	Board Coordinator	70% sensitivity. Other measures may also be required to be included to ensure grader is performing to required standard.
National confirmation required that 80% sensitivity and 80% specificity are satisfactory levels for EQA.	DRS Lead Clinician	

Actions to be considered for graders with sensitivity 70-79%		
Sensitivity of grader at 70-79%:		
Action proposed for the graders with a sensitivity of 70-79%:		
<ul> <li>Compare their previous EQA result (6 months before) – if this is &gt;= 80%, monitor performance at next national EQA. If the sensitivity at the last EQA was &lt;80%:</li> <li>Draw the grader's attention to their results</li> <li>The person should review their performance and learn from the grades they allocated incorrectly.</li> <li>Monitor their next EQA result and compare it with the current one. If there is no improvement to above 80% sensitivity, the person may have to undergo further personalised training.</li> <li>In the meantime, decide if they should :</li> <li>continue with Level 1or 2 grading</li> </ul>	Lead Clinician/ Service Manager Service Manager/ Lead Clinician/Board Coordinator	
<ul> <li>continue with slit lamp examination if applicable</li> <li>continue to send referable retinopathy to ophthalmology</li> </ul>		
	Service Manager/ Lead Clinician/Board Coordinator	
Communication Plan for outliers below 70%: Inform the DRS Service Manager, the Lead Clinician, the DRS Collaborative Coordinator and DRS Lead Clinician.	Board Coordinator	<ul> <li>Draft action plan for comments to local Lead Clinician/Service Manager</li> <li>Final action plan prepared</li> <li>Circulate to relevant parties i.e.</li> </ul>

		DRS Collaborative Coordinator and DRS Lead Clinician
Advise local DRS Lead Clinician and liaise with them over the action plan, potential solution and discuss responsibilities/actions of their part in this	Service Manager/Board Coordinator/ Lead Clinician	
Advise local Diabetes MCN Clinical Lead and liaise on progress	Service Manager	
If the action successfully resolves the problem, prepare a report for NSD	Service Manager/Board Coordinator/ Lead Clinician	
The DRS Collaborative and NSD should continue to monitor for recurrence using 6 monthly EQA.	DRS Lead Clinician/ DRS Coordinator	
Keep the Director of Public Health informed	Board Coordinator	
Local media/'Communications' not to be alerted		
Public Health Governance Group to be informed	Board Coordinator	
Clinical Governance Group to be informed	Board Coordinator	
Inform NSD Screening National Coordinator, Screening Programmes and Scottish Government representative of progress and outcome of review as required	Board Coordinator	
Share with other health board's information and action plan so that mutual leaning/experiences can be shared.	All	

## ADDITIONAL QUESTIONS/NOTES:

Questions/points raised:	
"Can you confirm that level 1 or 2 graders are able to do their function well i.e. not necessarily able to accurately separate those with referable/non- referable disease?"	If level 1 grader query with level 2 graders if any issues re grading have arisen in the screening programme If level 2 grader query with level 3 graders if any issues re grading have arisen in the screening programme
"There may be wider issue of distributing checks of any one grader across a number of 'level 2 graders"	Re Level 1 Grader –A list is created in the Level 2 grading task list by date order of which the Level 2 graders will work through Re Level 2 grader- A maximum of 12 random patients per week are quality assured by a level 3 grader
As per the national escalation procedures consider the people/financial/operational/ clinical/eHealth and external impact for any review actions and ensure that these are realistic. If graders are suspended and further graders are then required to review previous work then what is the impact to the current service?	
Consider if external assistance from other grading centres might be required. Confirm if these available to help?	

Document version -

Version		Authorised by	Date of Issue
1.0	Reviewers: DRS Collaborative working groups: Clinicians Group Board Coordinators Group DRS Executive	Dr C Styles, Lead Clinician, DRS Collaborative	May 2012
1.1	Reviewers: DRS Lead clinician	Dr C Styles, Lead Clinician, DRS Collaborative.	Nov 2019