UK National Screening Committee

NHS Screening Programmes

Diabetic Eye

Programmes that do not arbitrate on R1/R0

Guidance note

Version 1.0 07 May 2013

About the NHS Diabetic Eye Screening Programme

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

The UK National Screening Committee and NHS Screening Programmes are part of Public Health England (PHE), an executive agency of the Department of Health. PHE was established on 1 April 2013 to bring together public health specialists from more than 70 organisations into a single public health service.

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Review / approval

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Programmes that do not arbitrate on R1/R0

1 Purpose

1.1 This guidance note is for programmes and their commissioners that do not arbitrate on non-referable grades. It provides advice on steps that commissioners and programmes should take to assure themselves that the quality of their grading will support this approach.

2 Context

2.1 Approximately 15 programmes report that they do not arbitrate on differences for non-referable grades between primary and secondary grading (R1M0 and R0M0).

2.2 It is recognised that although patients will be screened annually regardless of whether their grade is R1M0 or R0M0, it is very important that patients are given correct information about whether or not they have background retinopathy as this can be important in a patient taking steps in managing their diabetes.

2.3 In addition, the presence or absence of any retinopathy may well become an important risk factor for changing screening intervals in the future and therefore ensuring accurate grading is important.

2.4 Programmes do not currently second grade all patients whose primary grade is R0M0 in both eyes. Additional grading of images twice or three times will need to balance by how much each additional grade increases the accuracy of the final grade against the use of resources in achieving this.

2.5 It is also acknowledged that there will always be some images where graders cannot agree on the final grade.

3 Current arbitration rates

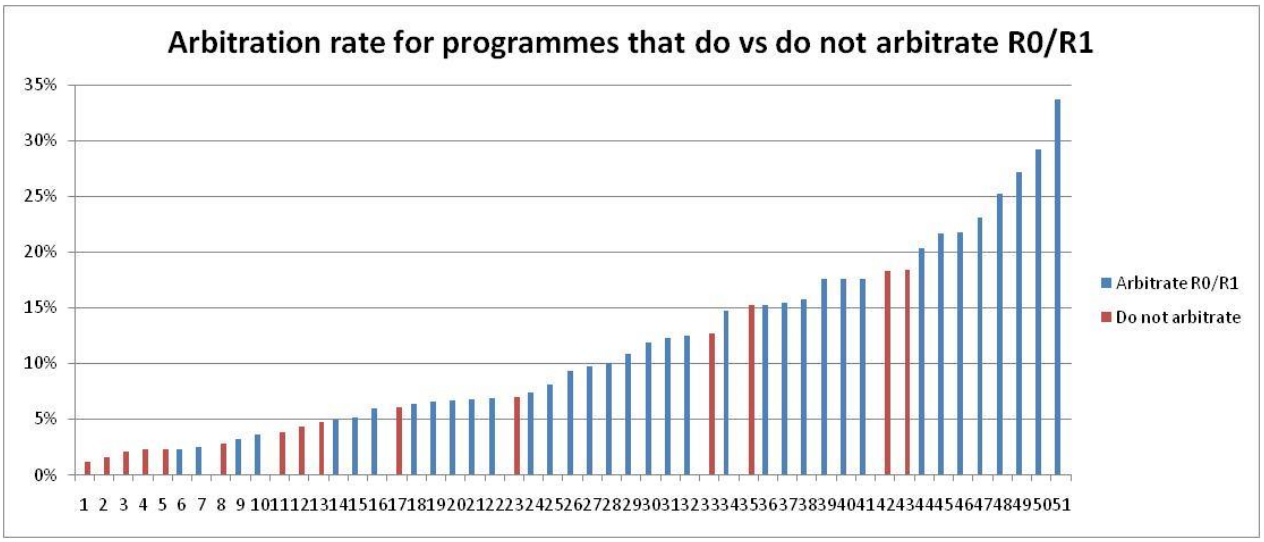
3.1 Graphs A and B show arbitration rates for programmes that do and do not arbitrate on R1/R0.

3.2 The data is calculated from the number of image sets arbitrated during 2010-11 out of all image sets primary graded. Of 87 programmes that submitted data for 2010-11, 59 were able to provide data on number of image sets primary and arbitration graded. Of these, 51 subsequently filled in a questionnaire that provided information on whether or not the programme arbitrated between R0/R1. These 51 programmes are represented in the following data, which assumes that the R0/R1 arbitration status at the time of the questionnaire was true during the 2010-11 report year.

- 36 out of 51 programmes do arbitrate between R0/R1
- 15 out of 51 programmes do not arbitrate between R0/R1

3.3 Based on this data the median and interquartile range of programmes that do arbitrate is 11.3% (IQR 10.9%) and is 4.3% (IQR 7.5%) in programmes that do not arbitrate.

Graph: Range of arbitration rates



4 National guidance

4.1 The NHS Diabetic Eye Screening Programme (NDESP) Quality Assurance Committee has considered whether it is appropriate to issue guidance on whether or not **all** programmes should either arbitrate or not arbitrate on differences of R1/R0. However, it was felt it was not appropriate to direct all programmes to adopt one or other approach as it is clear it is only safe to undertake this approach if programmes can demonstrate their grading is both accurate and consistent over time.

4.2 Therefore, until **all** programmes have demonstrated they can achieve a level of accuracy and consistency, NDESP will not review this guidance.

4.3 However, it recognises that some programmes have already made a decision to stop arbitrating on R1/R0. This guidance addresses programmes that have already stopped arbitrating and provides guidance on what processes they should have in place to assure commissioners that grading quality is maintained and programme outcomes are not adversely affected.

4.4 The local programme clinical lead is accountable for grading and is responsible for ensuring that this guidance is followed.

5 Maintaining oversight on grading quality if no longer arbitrating on R1/R0

5.1 If a programme decides to stop arbitrating on R1/R0, then the evidence that has been considered and the steps taken to maintain accuracy and consistency in grading should be presented by the clinical lead to the programme board for regular review.

5.2 Commissioners will need to be assured that grading quality is regularly reviewed and steps are taken to maintain accuracy and consistency so that:

- It is unlikely to significantly affect the detection of referable disease
- The misallocation of grades between R1 and R0 is not significantly changed through the removal of the arbitration grader

5.3 The clinical lead should review the following information at least quarterly and present a summary report to the programme board:

- Overall arbitration rate
- The percentage of results that are different between primary and secondary grading (what would be the arbitration rate). If the level is rising, programmes should consider undertaking steps to improve consistency in grading and/or reintroduce arbitration grading
- Test and Training (TaT) results. Graders' results should be reviewed
- Internal QA measures: routine monitoring and feedback of results of inter-grader agreement reports
- Training: what routine training is in place to maintain grading competency, for example multi-disciplinary team meetings
- Results of 10% R0M0 secondary grading

6 Hierarchical and non-hierarchical grading

6.1 If programmes choose not to arbitrate on R1/R0 then they should use a hierarchical grading system. Graders undertaking secondary grading should be those who have demonstrated greatest consistency and accuracy through TaT and review of inter-grader agreement reports.

7 Reporting results to patients

7.1 The final grade will be the second grade and this will be the result that will be reported to the patient.

8 Implementation of guidance

8.1 Programmes that do not arbitrate on R1/R0 should take steps to implement this guidance by August 2013.