

Risk stratification for diabetic eye screening

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Abbreviation

EQA External quality assurance

To the Editor: In the August issue of this journal Looker et al presented results from data analyses of patients from the Scottish Diabetic Retinopathy Screening programme [1]. The principal finding was that transition rates to referable diabetic eye disease were lowest among people with type 2 diabetes and who had had two consecutive screens showing no visible retinopathy. We had already published this result in *Diabetes Care* [2], online in November 2012 and in print in March 2013 but this has not been acknowledged by Looker et al. We recognise that our results were based on data from patients for whom we had no information on the type of diabetes, but they would predominantly have been patients with type 2 diabetes because they were from a population-based screening programme in England. The transition rates found in the Scottish study are of the same order as those found in our cohort.

The authors state that a major strength of the paper is that it uses a centralised quality-controlled grading system and the criteria for referable disease have not altered over the course of the programme. This tends to suggest a single reading centre although they have not expressly stated this. However, Goatman et al [3] reported in 2012 on external quality assurance (EQA) of grading in the Scottish programme in nine reading centres. They reported that there were significant differences in sensitivities and specificities between graders and between reading centres in 2008, when much of the data in the Looker paper would have been collected. This is not alluded to in the Looker paper [1].

The authors discuss several possible reasons for the apparent regression of mild background retinopathy to no visible retinopathy at subsequent examination. However, they do not raise the possibility that this may be due to changes in grading or the differences in sensitivity and specificity between graders enumerated in the EQA paper [3].

These recent results suggest that a 2 year screening interval may be safe in those with type 2 diabetes and no visible retinopathy on two consecutive screens. In our paper [2] this may be deduced from the results. However we also discuss the quality of our grading and the need to validate these results in other populations before implementation of changes in screening intervals. There is no 'gold standard' for grading of digital retinal images and hence the introduction of extended intervals in any programme would require validation of any rules in existing datasets, continuing education of graders and robust failsafe procedures, EQA and QA of grading.

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