

Diabetic Retinopathy Study – Risk Based Prioritisation

Do you have diabetes?

Have you been seen in the eye department between 2013 and 2016?

Our hospitals are taking part in important research looking at how to better prioritise care for higher risk patients with diabetic retinopathy. This research project begin to collect information from January 2023 on patients who were seen in the eye department between 2013 and 2016. Sunderland Eye Infirmary would like to access your medical records and share information about your diabetic retinopathy with the University of Birmingham. Your name and any data that identifies you will be removed before sending information outside this NHS Trust.

If you are a patient with diabetes and have been seen/treated in the eye department between 2013 and 2016 and would prefer your data not to be included in this study, please e-mail Salman Sadiq, salman.sadiq1@nhs.net. Your care will not be affected should you choose to opt out of the study.

For more information on this study please visit this website: [to be added once live]

Once the study is completed, results will be published on the website.

Are you interested in being a patient advisor?

We are looking for patient advisors who will meet on Zoom four times during the study to ensure patients' and experts' perspectives remain influential to the study.

If you are **interested in taking part, for more information** please e-mail Sajjad Haider, S.Haider.2@bham.ac.uk.

Progression of Diabetic Retinopathy from referral to treatment or vision loss: External validation, update and net clinical benefit of a multivariable prediction model

Background: Patients with diabetes commonly develop complications at the back of the eye, called diabetic retinopathy. This condition can cause blindness if left untreated and therefore diabetic patients are screened every one to two years in the diabetic eye screening programme. Once more serious disease develops, hospital appointments become necessary for monitoring. With diabetes becoming more common, there is increased demand for hospital appointments, resulting in delays. This means there is a chance of higher risk patients losing their sight while waiting to be seen. It would therefore be safer to have a system by which these higher risk patients could be prioritised.

Aims: Using information (data) collected from general practices, we have developed a model which identifies patients at high risk of progressing to diabetic retinopathy requiring treatment or to loss of vision. This model now needs to be tested in a hospital setting to ensure it works well for patients using hospital services.

Methods: We will test the performance of the model in hospital data and update it by including additional information not available in the general practice data which was originally used to develop the model. We will then present our findings to a group of patients and experts to decide on how the model can be put into practice to benefit patients.

Patient and public involvement (PPI): We have carried out meetings with general practitioners, consultant eye surgeons and patients with diabetic retinopathy under hospital care to obtain advice, and we have incorporated that advice into our research plan.

Dissemination: Based on the results of this work we aim to produce high quality information for doctors and patients about patients' risk. This will enable doctors and providers to make more informed decisions about the timing of follow-up appointments and improve safety for higher risk patients. We will make results available widely by publishing in journals, presenting at events where we can engage with clinicians, and sharing our results with Diabetes UK (charity), The Royal College of Ophthalmologists, and commissioners. We hope our findings will help inform management guidelines.