

Screening intervals for diabetic retinopathy

Submission date 06/04/2012	Recruitment status No longer recruiting	☒ Prospectively registered ☐ Protocol
Registration date 12/04/2012	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 30/01/2017	Condition category Nutritional, Metabolic, Endocrine	☐ Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
HTA Project: 10/66/01

Study information

Scientific Title
Development of a cost-effectiveness model for optimization of the screening interval in diabetic retinopathy screening

Acronym

CODES

Study objectives

Study aims:

1. Use demographic and routinely collected clinical information from 15000 patients in 85 Gloucestershire GP practices to develop a risk score for each patient and to identify patient groups whose risk of retinopathy progression is low and whose screening interval can be safely extended
2. Model what the influence of the grading classification error is on over referrals and under referrals and how that influence changes over time, taking into account sequential grading results and hospital outcome results, comparing screening intervals that vary according to risk score against current standard practice (annual screening intervals for all patients) and other fixed-interval approaches.
3. Extend our results to multi-ethnic populations using a dataset of 2000 Asians and 5000 Caucasians from Coventry and Warwickshire and a South London dataset of 2000 people with diabetes including 700 people of African Caribbean origin. Grading results can be made available from these datasets for at least a 3 year period. The risk score and algorithm will be tested against retinopathy grades in the two datasets where follow-up data is available
4. Determine if assigning diabetic patients to differing diabetic retinopathy screening intervals using a risk estimation model is cost-effective when compared to current practice, which is annual screening of all eligible patients with diabetes
5. Estimate the economic benefits if personalised screening intervals were to be applied to the National Screening Programme in England

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Primary study design

Observational

Study design

A primary research study using routinely collected clinical data to model the clinical efficacy and cost-effectiveness of variable screening intervals.

Study type(s)

Screening

Health condition(s) or problem(s) studied

Diabetic Retinopathy

Interventions

The Health Technology being assessed is a variable screening interval based on risk of diabetic retinopathy (DR) assessed using two field digital photographs after pupil dilation as used in the English National Screening Programme (ENSPDR) and other available clinical data.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

A risk-based algorithm for screening interval

Key secondary outcome(s)

1. Years of sight saved
2. Quality-Adjusted Life Years (QALYs) gained
3. Key recommendations for further research

Completion date

01/05/2014

Eligibility

Key inclusion criteria

1. Participants over the age of 12 years
2. Diagnosed with diabetes and have attended a diabetic retinopathy screening programme in one of the study areas of Gloucestershire, Coventry and Warwickshire, South London and Nottingham.
3. Have been sent the required information about transfer of risk factor data as advised by the Department of Health funded GP2DRS (General Practice to Diabetic Retinopathy Screening) Project and they would have been given the opportunity to inform their General Practice or Screening Programme that they did not want their risk factor data transferred.
4. The participants in this study are pseudoanonymised data on those people who have attended for screening and risk factor data has been transferred according to the recommended guidelines of the GP2DRS project.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. People with diabetes under 12 years
2. Those who have not attended for screening
3. Those people who have indicated that they do not want their risk factor data transferred to the screening services.

Date of first enrolment

01/05/2012

Date of final enrolment

01/05/2014

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Gloucestershire Diabetic Retinopathy Research Group

Cheltenham

United Kingdom

GL53 7AN

Sponsor information

Organisation

Gloucestershire Hospitals NHS Foundation Trust (UK)

ROR

<https://ror.org/04mw34986>

Funder(s)

Funder type

Government

Funder Name

NIHR Health Technology Assessment Programme - HTA (UK) ref: 10/66/01

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/09/2015		Yes	No