

Examining attendance in Primary Care for diabetic retinopathy screening in Tayside

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Background

Diabetic retinopathy is the most feared complication of diabetes mellitus and appropriately timed treatment can prevent blindness. The timing of most effective treatment is when the retinopathy is asymptomatic. Screening for diabetic retinopathy is cost-effective, and a National Screening programme across the UK has been recommended. However, population coverage may be influenced by the strategies used to invite patients for screening, as well as the factors that influence whether patients attend. These latter factors include: the patient's age and sex; the social characteristics of patients, including whether they live in deprived circumstances; the patient's geographical location in relation to the screening site (accessibility). Unfortunately, the influence of such factors on screening attendance for mobile retinopathy among patients with diabetes has been under-researched and this will be redressed here.

Aims of Study

- To explore the social and geographical factors which influence attendance at the Tayside mobile retinal photography unit in the period 1990 to 2002
- To use this information to help shape the new service which will be implemented in Tayside over the next few years

Methods of Working

Relevant data on patients will be extracted from the DARTS database and patients will be assigned to census based geographical areas anonymously using the strategy used in previous requests for geographically identifiable DARTS data that have been given ethical approval. A second dataset will be constructed which includes socio-demographic information about the places in which the patients live. It will also include information on deprivation and the accessibility (using road-based travel time distances) of the residential locations of the patients in relation to the sites visited by the eye van. A survey of GP practices will be undertaken to assess the strategies used to encourage patients to attend screening. This will be used to construct quantitative variables, which will be incorporated into the statistical analysis of factors influencing screening attendance. The factors influencing attendance for screening will be modelled statistically. The implications of the results will be analysed so that they inform the development and implementation of the new mobile/static camera services across Tayside

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