

# Development of an intervention to facilitate implementation and uptake of diabetic retinopathy screening

## Why it matters

Regular screening for diabetic retinopathy ensures early detection and timely referral for treatment that can prevent or delay the development of diabetes-related blindness. Despite this, screening attendance rates are below recommended levels in many countries, including Ireland. We know people may not access and use services such as retinopathy screening for different reasons. For example, they may not be aware of the risk of retinopathy or may be unable to travel to their local screening centre. However, interventions to date have focused on just some of the barriers to screening attendance, missing opportunities to target important factors that may influence people's behaviour, including providing information on social/environmental (e.g. emphasising programme is free) or emotional consequences (e.g. reassurance) of attending screening. Also, few interventions have been developed for general practice even though most people with diabetes attend their GP regularly, and health care professionals play a role in referring people to retinopathy screening.

## Our approach

Using a number of steps, we designed an implementation intervention for general practice, that is, an approach to support *implementation* (uptake) of another clinical programme, in this case, the national retinopathy screening programme in Ireland, Diabetic RetinaScreen.

- **Step 1:** We interviewed 47 people with diabetes and 30 health care professionals to understand why people did and did not attend.
- **Step 2:** Guided by behaviour change theory we made a list of possible intervention components to target the barriers and enablers of screening attendance.
- **Step 3:** We then held three meetings with people with diabetes, GPs, nurses, and specialists to get their opinions on the acceptability and feasibility of these components and created a shortlist of possible components. We consulted representatives from RetinaScreen to check our intervention 'fit' with how the programme currently works.
- **Step 4:** To decide the final intervention components, we looked at existing evidence of effectiveness and considered other factors such as affordability and equity.

## What we found

People with diabetes experience several barriers to screening, including confusion about the differences between screening and routine eye checks, and fear of a negative screening result. Enablers include a recommendation from friends, family or health care professionals and being aware of the importance of screening and the risk of retinopathy. For health professionals, barriers included the lack of readily available information on uptake in their practice or local area. Most intervention components we suggested were acceptable to our stakeholders, but they had different opinions about what was feasible in practice. The final intervention involves general practice staff following steps to remind people about the importance of attendance:

1. **A practice audit** to see whether people are registered with the service and if they have attended
2. **An automatic alert** added to the records of patients who have not attended screening, which will prompt GPs and nurses to remind patients
3. **Practice-endorsed reminders** (delivered in person, by phone and letter), and an information leaflet targeting key attitudinal and knowledge barriers; informing them why screening is important and how to make an appointment.

Read the full paper [here](#)

## At a glance

### Developing an intervention to improve attendance at diabetic retinopathy screening

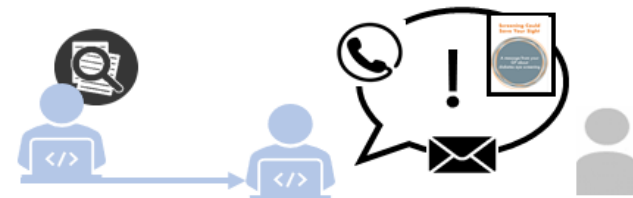
Retinopathy screening attendance rates are below recommended levels in many countries, including Ireland. Interventions to improve attendance to date have only targeted some factors which influence attendance, and few have been developed for general practice. As people with diabetes attend their general practice regularly, there is an opportunity for health professionals to influence whether people go to screening.



We took a number of steps to develop our intervention to be delivered in general practice: 1) interviewing people with diabetes and health care professionals to understand why people did and did not attend; 2) considering behaviour change theory to come up with possible intervention ideas; 3) asking GPs, nurses, specialists, and people with diabetes for their opinions on what would work, and 4) looking at evidence of what works.



Our final intervention involves general practice staff checking records to see whether people have attended, reminding those who have not attended (in person, phone, letter) and giving them a leaflet with key messages about why they should attend, and how to make an appointment.



Riordan F, Racine E, Phillip ET, Bradley C, Lorencatto F, Murphy M, Murphy A, Browne J, Kearney PM, McHugh SM. Development of an intervention to facilitate implementation and uptake of diabetic retinopathy screening. *Implementation Science*. 2020.

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Improving Diabetes Eye-screening Attendance