

## **Does the NHS Diabetes Prevention Programme have an impact in the population? : A study exploring the impact of the programme in patients who are registered in primary care**

### **What we knew**

“Prediabetes” (Non-diabetic hyper-glycaemia) is a ‘warning sign’ that blood sugar levels are higher than normal.

If ignored, blood sugar levels can increase, and a person can go on to develop type 2 diabetes.

In England, the NHS Healthier You Diabetes Prevention Programme is offered to adults who have raised blood sugar levels. It offers lifestyle advice to help reduce people’s risk of developing type 2 diabetes.

People were usually offered a place on the NHS Healthier You Diabetes Prevention Programme through the GP at primary care. We wanted to check whether those people who were referred to the programme through their GP primary care practice were less likely to develop type 2 diabetes compared to those who were not referred to the programme.

By exploring this relationship, we will be able to estimate the impact the programme has had on the population.

### **What we did**

We used data from patients attending primary care to identify if they were diagnosed with prediabetes, referred to the programme and whether they eventually developed type 2 diabetes during the study period. We used the study period, 01<sup>st</sup> April 2016 till 31<sup>st</sup> March 2020 to account for the start of the programme and avoid any impact of the COVID-19 pandemic.

We matched referring practices to non-referring practices over a set time period, before matching referred people (from the referring practice) to non-referred people (from the matched non-referring practice).

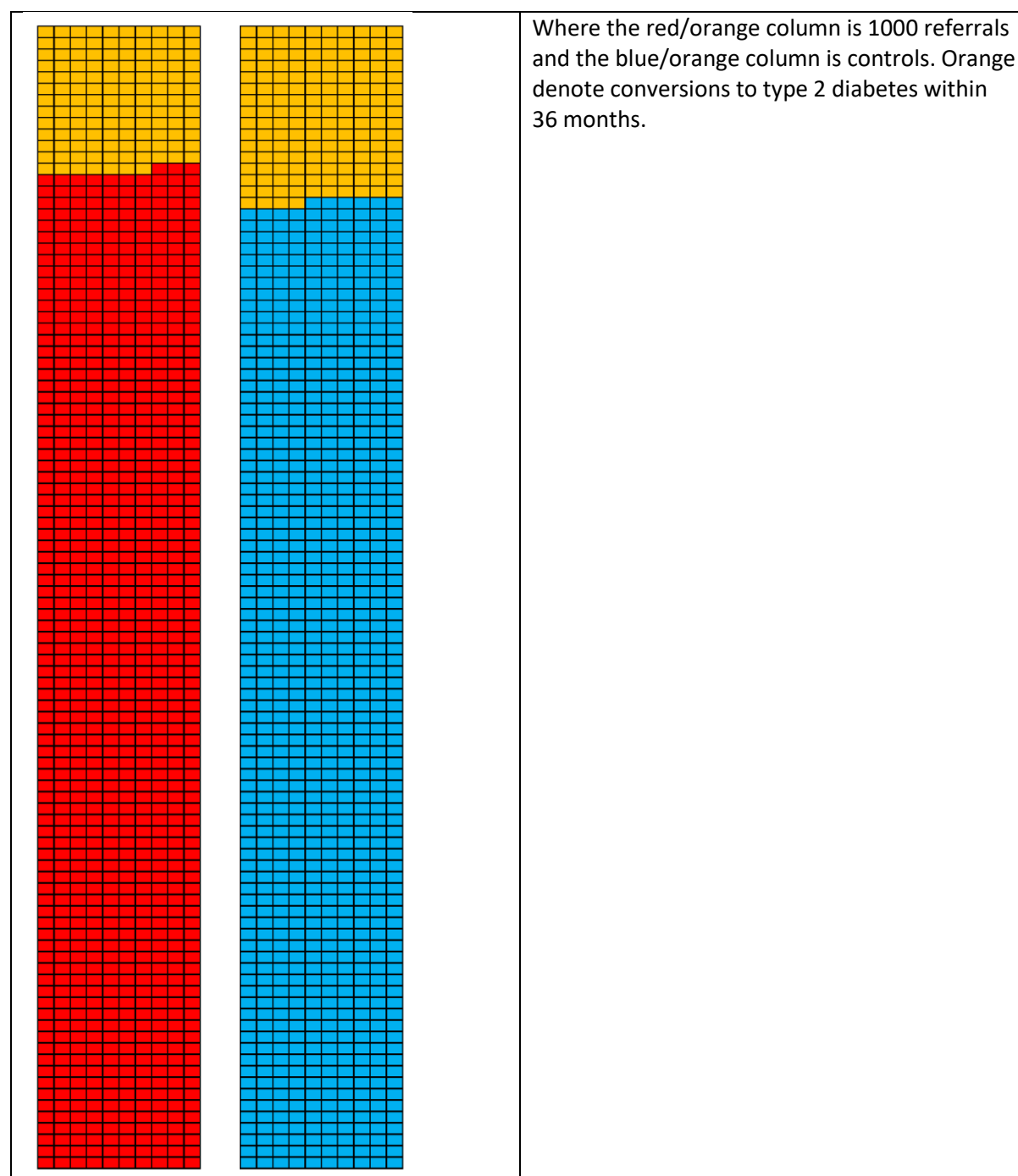
### **What we found**

We found that by April 2020, over 700,000 people were identified with prediabetes and around 100,000 had a code in their health record saying that they were referred to the programme. We had data from a total of 2,209 practices of which at least one referral has been recorded in 1,359 practices.

In the matching group we had 12,887 patients who were referred to the programme (cases) and 12,887 patients who were not referred which were the controls.

Although similar numbers developed type 2 diabetes in the two groups, statistical analyses controlled for the characteristics of the participants showed that the risk was 20% lower in people referred to the programme.

In other words, assuming 1000 referred cases and 1000 controls, by 36 months (three years) since referral we would expect 127 conversions to Type 2 diabetes in the cases and 154 in the controls.



We also found that those who were with an obese BMI (a BMI of 30 or over) were more likely to develop type 2 diabetes.

#### What this means

Individuals referred to the programme are less likely to develop type 2 diabetes over time. However, our data (for cases) is only from those who had the relevant referral code in their GP record, we cannot confirm whether they attended the programme or not.

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