

## Access and uptake to the NHS Diabetes Prevention Programme

### What we knew

There are inequalities in the types of people with Type 2 Diabetes. Men are more likely to become diabetic, as are people aged 50 years or over, those living with a disability, those living in deprived areas and people from some minority ethnic groups (those of South Asian origins in particular).

Non-diabetic hyperglycaemia (NDH), sometimes called prediabetes, occurs when your blood sugar levels are higher than normal but not high enough for a diagnosis of Type 2 Diabetes. Older adults and people from South Asian backgrounds are more likely to be prediabetic. Surprisingly, some studies suggest deprivation is not a risk factor, even though those deprived are more likely to have Type 2 Diabetes.

The NHS Diabetes Prevention Programme is designed to help and encourage people at risk of developing Type 2 Diabetes to make positive behaviour changes including increasing physical activity, improving diet and weight loss and aims to reduce the number of people developing Type 2 Diabetes. We don't know whether this programme to reduce the risk of developing diabetes could reduce inequalities. We do know from other types of health programmes that there is a risk that inequalities in health can actually increase as a result of those programmes.

Factors that might influence taking part in a programme could include the timings of the programme and whether this restricts taking part for those who are in work or have children or caring commitments, differences in how people perceive the programme and the content of the programme. Factors like these may vary across groups of the population and result in inequalities in access to the programme.

In other programmes, the type of people who get involved and continue with programmes right to the end are usually less deprived. As a result, it is likely that most of the benefits of the campaign occur among the less deprived who were potentially least likely to be at risk of the health condition (such as diabetes). The National Diabetes Prevention programme was explicitly designed to take account of such inequalities, reaching out to more diverse groups of people with prediabetes, and making the programme more accessible to them. We wanted to find out whether the programme was successful in reducing inequalities in Type 2 Diabetes.

### What we did

We looked at the characteristics of people at different stages of the National Diabetes Prevention Programme. The people and stages were defined as:

1. The general population with prediabetes who could be targeted by the programme
2. The patients who were invited to the programme
3. The patients who took part in the programme (at least 1 session)
4. The patients who completed the programme

We compared the characteristics of people at each stage to see whether and where the programme begins to differ from the general population with prediabetes. If there are fewer of the groups who are most at risk of developing diabetes (older adults, those living in deprived areas and from South Asian backgrounds) at the last stage compared to the first stage, then this is worrying because this means that the groups who are most at risk of diabetes are least likely to participate and complete

the diabetes prevention programme, suggesting that the programme is very unlikely to reduce inequalities in diabetes.

### What we found

Compared to the general adult population of people with prediabetes (the first stage), at the second stage there were more people from minority ethnic backgrounds, and similar numbers of people from the oldest (more than 80 years) and youngest (less than 40 years) age-groups, although fewer people living in deprived areas were invited to take part in the programme. At the third stage, when people initially took part in the programme, we found considerably fewer people with disabilities, and fewer people aged 80 years and over took part. At the final stage (on completing the programme), the number of people with disabilities reduced further, as did the number of people from non-White ethnic backgrounds.

Overall, from stages 1 to 4, some of the groups who are most at risk of Type 2 Diabetes reduced in numbers. These include those from non-White ethnic groups who were more likely to be invited to participate in the programme, but once having been invited, were less likely to complete the programme. Furthermore, adults living in the most deprived areas and those living with disabilities are under-represented at all stages of the programme compared to the general population of people with prediabetes (stage 1).

### What this means

Social inequalities in Type 2 Diabetes are unlikely to reduce as a result of the programme for these groups, who are most at risk of diabetes: - adults who live with disabilities and those who live in the most deprived areas. In terms of ethnic differences, although those from non-White ethnic backgrounds are more likely to be invited to participate in the programme, they are then less likely to complete the programme.

Understanding at which stage these inequalities are occurring can help us target the programme more effectively at each stage, whether it is at the invitation to participate stage, at the initial participation stage, or during the programme stage.

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