Improving The Understanding of Diabetes in Underserved Communities to Improve Targeted Interventions and Reduce Health Inequalities

Scope

Diabetes UK welcomes applications for research which seeks to improve the understanding of diabetes in underserved communities to improve targeted interventions and reduce health inequalities. Reducing health inequalities remains a core and enduring commitment for Diabetes UK. This highlight notice builds on our previous call focused on the broad causes and impacts of health inequalities in diabetes, and now focuses on three specific areas where targeted, community-informed research can drive meaningful impact.

These priorities have been shaped through extensive work by our Diabetes Research Steering Groups (DRSGs), which bring together researchers, healthcare professionals, and people living with diabetes to co-develop research directions that respond to real-world concerns. They are also supported by insights from our Diabetes Inclusive Community Engagement (DICE) programme.

Three research priorities have been identified:

- **Understanding the causes of diabetes across diverse ancestries:** To address long-standing gaps in knowledge caused by the underrepresentation of ethnically diverse populations in research.
- **Developing culturally tailored physical activity interventions:** To reflect cultural contexts, lived experiences, and structural barriers that limit engagement.
- **Enhancing support for women with diabetes:** To better meet the needs of women whose experiences are often under-recognised in diabetes care.

These themes reflect a consistent message from underserved communities: people feel unseen and poorly supported by existing models of research and care. For example, our position paper Supporting women with diabetes experiencing menopause highlights the lack of tailored support for women during this time. The need for more inclusive, representative research is further evidenced by DRSG-supported workshop publications on health inequalities in diabetes and physical activity in underserved populations.

To achieve lasting change, research must be grounded in genuine partnership. We strongly encourage applicants to involve community organisations from the earliest stages of project development. These partnerships can help shape research that is respectful, relevant, and more likely to translate into sustainable improvements in care.

We welcome ambitious, inclusive, and community-focused research proposals that address these priorities and contribute to reducing diabetes-related health inequalities across the UK.

Understanding the Causes of Diabetes in Diverse Ancestries

Background

Epidemiological and mechanistic studies have identified differences in the causes, onset, progression, and treatment intensification patterns for diabetes across diverse ancestries [1–3]. Individuals of Black and South Asian ancestry are often diagnosed much younger and with leaner BMI compared to White Europeans [4]. Gestational diabetes mellitus also occurs more frequently in South Asian and Black women and is a leading cause of young or early-onset type 2 diabetes[5]. Similarly, 6% of young South Asians are misdiagnosed with type 2 diabetes when they have type 1 diabetes [6], suggesting that current diagnostic criteria is insufficient. Many of these inequalities have not been explored in other ancestral groups including East Asian, West Asian, and populations of African or Caribbean ancestry. In the UK, measures used for type 2 diabetes risk prediction and management methods are the same across different ancestry groups. A lack of understanding of the causes of diabetes in diverse ancestries likely affects diabetes care and therefore outcomes and experiences in these groups.

We are interested in funding projects that are focused on improving diabetes risk prediction and introducing precision approaches to diagnosis and management of all forms of diabetes in diverse populations. We are particularly interested in funding multi-disciplinary, mechanistic and causal projects spanning studies both from laboratory-based and large-scale epidemiological approaches.

Key research priorities

1. What are the ways in which diabetes risk prediction can be improved for people living with diabetes from diverse backgrounds?
2. How can precision diagnosis and management be brought to diverse populations?
3. What are the individual, clinical, and economic benefits of improving diabetes risk prediction, diagnosis and management across diverse populations?

Tailored Physical Activity Interventions to Address Health Inequalities

Background

As a society, we face major challenges in public health with an epidemic of chronic health conditions, mental health problems and physical inactivity. Some sections of the

population face unfair and unavoidable differences in their health status and life expectancy. Health inequalities exist within diabetes in relation to prevalence, management and outcomes, which are linked to economic, social and environmental disadvantages.

Regular physical activity and limiting sedentary behaviour are recommended in the prevention and management of diabetes through benefits to glucose control, weight management, risk of diabetes-related complications and wellbeing. There is potential for physical activity to have a key role in addressing health inequalities in diabetes, especially among disadvantaged populations who often face greater barriers to good health. Yet, many sections of the population do not engage in sufficient levels of physical activity to benefit health and are highly sedentary.

The purpose of this funding highlight notice is to support high quality research that seeks to advance knowledge and practice in relation to addressing health inequalities in diabetes through physical activity.

Key research priorities

1. Exploring key aspects of inequalities related to diabetes health and physical activity. This may include, but is not limited to, socioeconomic status, geographic location, age, ethnicity and those with comorbidities.
2. Improving understanding of the type, amount and patterns of physical activity and sedentary behaviour in relation to diabetes risk and outcomes particularly across disadvantaged groups. This includes understanding interactions with pharmacological therapies.
3. Exploring how best to support people from disadvantaged groups and backgrounds with or at risk of diabetes who face unique barriers with respect to becoming physically active and limiting sedentary behaviour.
4. Developing tailored approaches to the design and implementation of accessible interventions to address health inequalities in populations affected by diabetes.

Enhancing Support for Women with Diabetes

Background

The medicines and clinical guidelines used in the NHS are largely derived from clinical trials and research studies which have excluded or under-represented women.[7–9] This under-representation has significant implications for understanding differences between men and women with respect to the pathophysiology and progression of disease, the benefits and harms of certain medications, and the impact of the wider determinants of health on quality and experiences of care. Women also experience unique health-related events across the life course, which intersect with long-term conditions such as diabetes, however, women living with diabetes and their care providers lack clear

evidence on how to optimise prevention and treatment and reduce poor outcomes. As women from minoritised ethnic and from socioeconomically deprived areas have a higher burden of diabetes, they are disproportionately disadvantaged by this evidence gap. Although awareness of the intersection between diabetes and women's health has increased in recent years, this has not yet been translated into tailored, evidence-based approaches for prevention and treatment for women.

More women than ever are entering pregnancy with pre-existing type 1 and type 2 diabetes. Women who enter pregnancy with pre-existing diabetes, or who develop diabetes during pregnancy can experience increased risks of poor health during and after pregnancy for both themselves and their children.[10–11] Furthermore, our understanding of how hormonal changes during menopause impact management of pre-existing diabetes or contributes towards diabetes risk remains inadequate.[12] The Diabetes UK-organised Diabetes Research Steering Groups (DRSGs) have recently published recommendations to address key gaps in knowledge, treatment, and care related to diabetes and menopause. [13]

The lack of adequate evidence on safe and effective care for women during and beyond their reproductive life mean that women lack equitable and timely access to treatments which may benefit them. Furthermore, women and their care providers lack sufficient guidance on the benefit and harms of starting, stopping, or switching treatments for diabetes in relation to major transitions across the life course.

We are fortunate in the UK to have a wealth of routinely collected healthcare data from the NHS which can be used for research. Importantly, because routinely collected healthcare data cover the whole population, they can be used to study populations excluded from or under-represented in trials such as pregnant women, women experiencing menopause, and women from ethnically diverse and socially deprived populations.

We are interested in funding projects that improve our understanding of the interplay between diabetes and health for women across the life course, with topics spanning reproductive health in early life, fertility, preconception and pregnancy, mid-life, and menopause. We anticipate the research funded by this call will reduce the financial and resource burden on the NHS by optimising treatment guidelines and care pathways and address key strategic priorities such as the Women's Health Strategy for England[14] and Core20PLUS5 approach to reducing healthcare inequalities in the NHS.[15]

Key research priorities

1. How does diabetes affect key stages of women's health—puberty, fertility, pregnancy, and menopause—and what are the specific clinical and support needs at each stage?
2. How should fertility counselling, pre-conception care, and pregnancy planning address diabetes-specific risks and incorporate relevant technologies?
3. How does menopause influence glucose control and mental health in women with diabetes, and how can treatments, psychosocial support, and care models be adapted?
4. How can equitable access to NICE-recommended technologies be improved during key life stages, particularly for women not in specialist care?
5. What is the impact of diabetes on long-term health outcomes for women, and how do these intersect with inequalities related to ethnicity, deprivation, and migration?

Funding

Diabetes UK invites research proposals that address these knowledge gaps in line with our project grant scheme which provides funding of up to £500,000 over five years.

Deadline

The deadline for applications is **1 December 2025 17:00 hrs** (funding decisions will be made in April 2026)

How to apply

Apply for a Diabetes UK grant through our online portal and select ***"Improving the Understanding of Diabetes in Underserved Communities"***

For further details please contact the Diabetes UK Research team at research@diabetes.org.uk

Application assessment process

All applications received under this highlight notice will be assessed through the Diabetes UK standard assessment procedure for Project grants and will be considered in competition with all applications submitted.

Applications will be assessed by the scientific panel on the following criteria:

- Potential difference the research will make to the lives of people living with and at risk of diabetes.
- Scientific excellence and potential impact.
- Track record of the applicants.
- Value for money.

Applications will be assessed by the Grants Advisory Panel on the following criteria:

- Relevance to people with diabetes and its potential impact.
- The timescale on which the project could make a difference to people living with and at risk of diabetes.
- The extent of involvement of people with diabetes in the development and the management of the study.

References

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