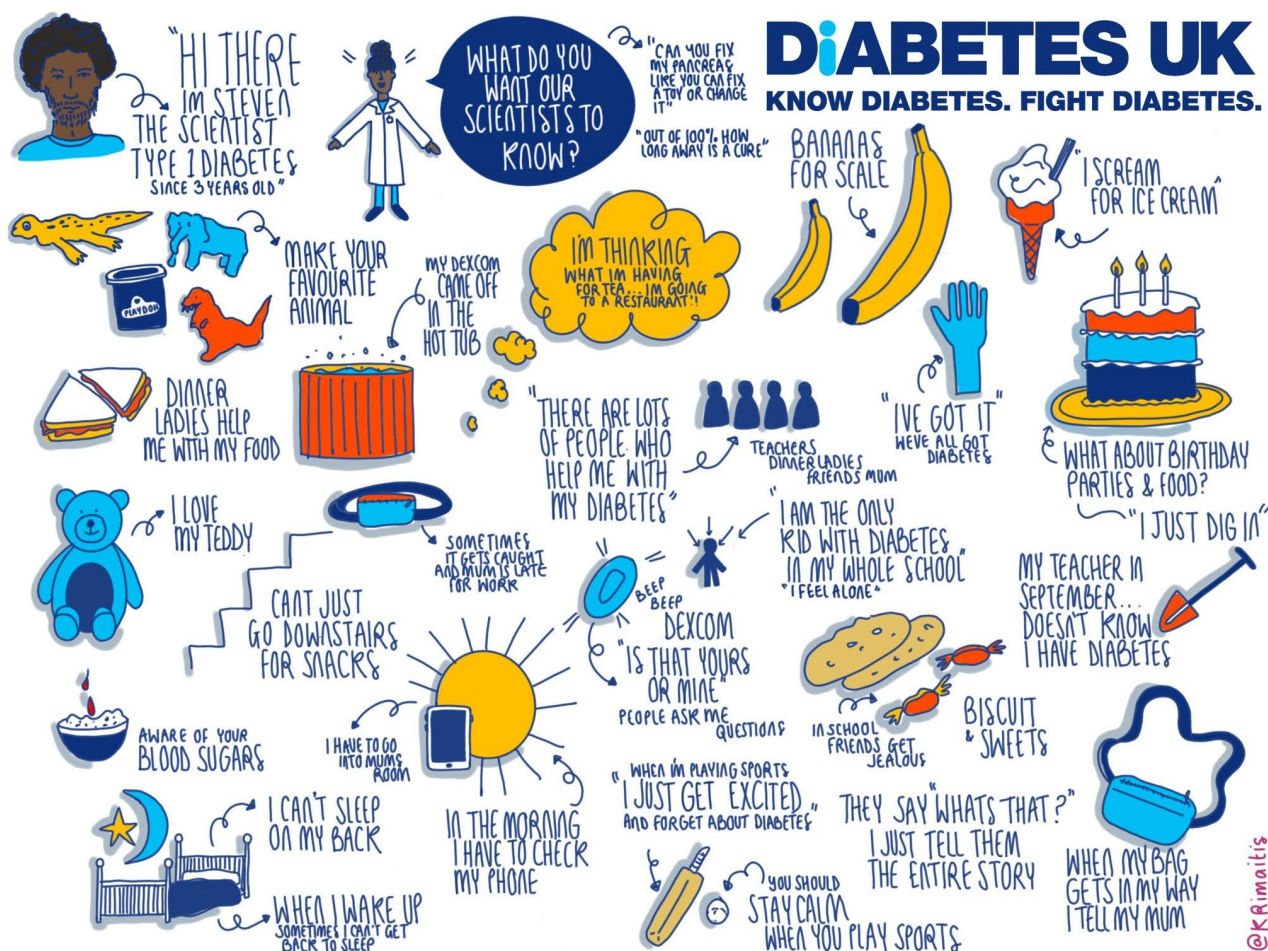


Leveraging the Insights of Children and Young People with Type 1 Diabetes to Shape Research

Scope

Diabetes UK welcomes applications for research that addresses priority areas identified by children and adolescents living with type 1 diabetes. These areas were established through direct conversations with children and adolescents aged 6–17 from across the UK, reflecting the issues they most want research to explore.



Background

In 2023, Diabetes UK's Diabetes Research Steering Group (DRSG7), focused on the experiences of children and adolescents with type 1 diabetes, conducted focus groups with participants aged 6–17 in Warrington, London, Cardiff, and Glasgow. These sessions aimed to centre the voices of young people in shaping the research agenda. Too often, the priorities of children and adolescents have been absent from diabetes research, with studies focusing more on the concerns of parents or healthcare professionals. This has led to a lack of co-creation and overlooked the unique insights of those living directly with the condition.

Type 1 diabetes is a complex, lifelong condition that requires constant management. For children and adolescents, managing diabetes is particularly difficult because of ongoing physical, emotional, and developmental changes¹⁻³. These include growth spurts and hormonal fluctuations during puberty, changing sleep patterns, and shifting social dynamics. These factors can make it harder to maintain consistent diabetes care, such as regular insulin administration and glucose monitoring. As a result, managing the condition can feel incompatible with typical aspects of growing up, such as attending school, socialising, playing sports, or going on trips.

Diabetes research has historically centred on adults, and young people's distinct needs have often been marginalised. Actively involving children and adolescents in research design, implementation, and evaluation helps ensure studies reflect their priorities and experiences. This approach is essential to the development of interventions that are relevant, practical, and effective.

The insights from these focus groups provide a powerful foundation for improving understanding and developing targeted, child- and adolescent-centred interventions. Lived experiences shared by participants highlighted the daily challenges of managing diabetes and underscored the need for research that supports their real-world needs.

Priority areas identified

Researchers are encouraged to propose appropriate methodologies and study designs to address the following priority areas. Applications from multidisciplinary teams with relevant expertise and, where appropriate, partnerships with industry and technology developers are welcomed.

1. Enhancing Diabetes Technology for Children and Adolescents

Children and adolescents commonly use continuous glucose monitors (CGMs) and insulin pumps. These technologies are central to their diabetes care, but young users report multiple limitations and challenges. Collaborative research approaches, including partnerships with industry, are welcomed to deepen qualitative understanding of children and adolescents' experiences with these technologies and to drive meaningful innovation. Research is needed to

- Understand the lived experiences of children and adolescents using CGM and insulin pumps, and how these insights can inform the design and delivery of technologies better suited to their unique developmental needs compared to adults
- Examine how devices can better support sleep (e.g., reducing sleep disruptions due to alarms or discomfort).
- Address the stigma associated with using devices in public or at school (e.g., phone checks in class, device alarms).
- Investigate innovative methods to prevent different types of hypoglycaemia, including during physical activity, at night, and in unfamiliar settings.
- Expand qualitative research on young people's lived experiences with diabetes technologies.

2. Addressing Emotional, Psychological, and Social Well-being

Managing type 1 diabetes affects not just physical health, but emotional and mental well-being. Children and adolescents face a broad range of anxieties, mental health stressors, and social stigma, often intensified by their diabetes. Research should consider:

- Understanding and addressing general anxiety related to diabetes management (e.g. needle phobia, CGM/pump anxiety, clinic visits, medication routines).
- Investigating how diabetes-related anxiety interacts with other common stressors, such as school exams or social pressures.
- Developing resources and tools to assess and support emotional well-being for children and their families.
- Creating holistic support systems that also include education and interventions for siblings, recognising their vital role in family care dynamics.
- Understanding how to support relationship-building within peer groups, including relationships with classmates, teachers, and wider social circles.

3. Assisting Children and Adolescents in Managing Life Transitions

Life transitions pose significant challenges for diabetes management. Research should:

- Explore how to support transitions between school stages (e.g., from primary to secondary school) and ensure continuity of care and support.
- Investigate strategies for preparing adolescents to manage diabetes independently as they move into further education, employment, or living alone.
- Address experiences of part-time work, internships, and employment, including employer awareness, workplace adjustments, and stigma.

4. Optimising Management of Exercise and Nutrition

Children and adolescents face unique barriers when managing diabetes during exercise and mealtimes. Research should:

- Co-develop practical, age-appropriate tools and educational resources to support exercise-related diabetes management.
- Investigate how to build general nutritional education tailored to developmental stages.
- Explore healthy approaches to weight management and body image.
- Acknowledge and sensitively address risks around disordered eating, while aligning with existing research priorities.
- Consider scenarios such as eating out, school trips, and travel, which introduce additional challenges.

5. Diabetes in Schools

School environments can be pivotal in shaping a young person's diabetes experience. Yet many children felt that current education and support approaches are often inconsistent. Research should:

- Apply principles from implementation science to test the feasibility and acceptability of new interventions in school settings.
- Understand the role of healthcare teams in supporting schools to manage type 1 diabetes.
- Develop comprehensive training and awareness programmes for teachers, school staff, and peers.
- Co-develop individualised health plans and school policies to support safety, inclusion, and consistency of care.

Cross-Cutting Themes

Proposals should thoughtfully consider several cross-cutting themes that underpin and enrich all research areas.

- Addressing stigma related to type 1 diabetes and its impact on mental health, school experiences, and social life of children and adolescents.
- Promoting equity by reducing disparities linked to ethnicity, socioeconomic status, and geography to ensure all young people receive the best support.
- Co-development: Actively involving children, adolescents, families, and communities in research to make it more relevant and effective.
- Using diverse methodologies including digital tech, qualitative research, and participatory design to capture the complexity of young people's lived experiences and innovate.
- Supporting the family unit by recognising caregivers and siblings as key partners in diabetes care and wellbeing.

By prioritising the voices of children and adolescents, this highlight notice aims to encourage research that truly reflects their priorities and leads to more responsive, inclusive, and effective diabetes research and care.

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.

Applicants are encouraged to show evidence of substantial patient and public involvement in all stages of the development and delivery of their project.

Deadline

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

How to apply

Apply for a Diabetes UK grant through our online portal and select ***“Children and Young People with Type 1 Diabetes”***

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

1. Moreland, E.C., et al., *The Impact of Physiological, Therapeutic and Psychosocial Variables on Glycemic Control in Youth with Type 1 Diabetes Mellitus*. 2004. **17**(11): p. 1533-1544.
2. Martinez, K., et al., *Psychological factors associated with diabetes self-management among adolescents with Type 1 diabetes: A systematic review*. Journal of Health Psychology, 2016. **23**(13): p. 1749-1765.
3. Streisand, R. and M. Monaghan, *Young Children with Type 1 Diabetes: Challenges, Research, and Future Directions*. Current Diabetes Reports, 2014. **14**(9): p. 520.