

Component 2: Report on a Health Issue

Assignment Title: Written Report on Type 1 Diabetes

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Introduction

Type 1 diabetes is a lifelong condition that affects the body's ability to regulate blood glucose levels. It develops when the body's immune system mistakenly attacks and destroys the insulin producing beta cells in the pancreas (World Health Organisation, 2024). As a result, the body produces little or no insulin, meaning people with Type 1 diabetes require lifelong insulin therapy to control their blood glucose levels (NHS England, 2024). Common signs and symptoms include excessive thirst, frequent urination, unexplained weight loss and blurred vision (NHS England, 2024).

Although Type 1 diabetes accounts for around 5-10% of all diabetes cases, it can develop at any age and is the most common type of diabetes affecting children and young people (NICE, 2025). Diabetes is an increasing public health concern because the number of people living with it continues to rise worldwide. The International Diabetes Federation (2025) estimates that approximately 589 million adults are currently living with diabetes, a figure that is expected to increase to 853 million by 2050 if current trends continue. Around 9.15 million of these people worldwide are living with Type 1 diabetes (International Diabetes Federation, 2025). In the UK, Diabetes UK estimates that almost 6 million people are living with diabetes with around 8% of diagnosed cases being Type 1 diabetes ((Diabetes UK, n.d.).

Risk Factors and Preventions of Complications

Type 1 diabetes currently cannot be prevented because it develops when the immune system mistakenly attacks the insulin producing beta cells in the pancreas (World Health Organisation, 2024). Although there is no known way to prevent the condition itself, many of its long-term complications can be reduced through effective diabetes management.

According to Chiesa and Marcovecchio (2021), poor glycaemic control is one of the most important modifiable risk factors for developing long-term complications. Other modifiable risk factors include obesity, smoking, Physical inactivity, high blood pressure and high cholesterol. These factors increase the risk of cardiovascular disease, which is one of the leading long-term complications associated with Type 1 diabetes.

Research suggests that maintaining good blood glucose control alongside a healthy lifestyle from an early stage may help reduce the risk of cardiovascular complications (Chiesa and

Marcovecchio, 2021). This highlights the importance of supporting people to manage their condition through ongoing education, regular monitoring and healthy lifestyle choices.

Monitoring and Management of Type 1 Diabetes

Effective management of Type 1 diabetes is essential to help people maintain stable blood glucose levels and reduce the risk of both the short-term and long-term complications. NICE (2022) recommends that everyone with Type 1 diabetes should receive an individual care plan that takes into account their lifestyle, preferences and treatment goals. This should include education about the condition, insulin therapy, regular blood glucose monitoring, healthy eating, physical activity and emotional support. Supporting people to understand and manage their condition can improve confidence, encourage self-management and help reduce the risk of future complications.

The updated NICE guidance (2025) also recommends the use of continuous glucose monitoring (CGM) for people with Type 1 diabetes. CGM devices continuously measure glucose levels throughout the day and night, allowing people to identify patterns and trends in their blood glucose levels. This information can help people to make informed decisions about insulin doses, food intake and physical activity while reducing the risk of both hyperglycaemia and hypoglycaemia.

Research also supports the use of continuous glucose monitoring. Manov et al. (2023) found that CGM improved glycaemic control by reducing HbA1c levels and average blood glucose levels. The study also found that people experienced fewer episodes of both mild and severe hypoglycaemia and people spent more time within their target blood glucose range. Together, these findings suggest that CGM may support day-to-day diabetes management and improve long-term health outcomes.

However, the study had several limitations. It was carried out in a single healthcare centre with a small sample size and had a short follow-up period and did not include a control group for comparison. The authors also concluded that larger long-term studies are needed to confirm these findings (Manove et al., 2023). Although these limitations should be considered, the findings are consistent with the current NICE guidance, which recommends the use of continuous glucose monitoring to help manage Type 1 diabetes.

Consequences of Type 1 Diabetes

Although effective management can help individuals with Type 1 diabetes live long and healthy lives, the condition can still have significant physical, psychological and social consequences. Living with Type 1 diabetes requires constant self-management, including frequent blood glucose monitoring, insulin administration and careful decision making around food, exercise and illness. This ongoing responsibility can be difficult to manage and may affect a person's overall quality of life. Research suggests that the ongoing demands of managing the condition are linked to stress, anxiety, diabetes related distress and depression, while also affecting education, employment, relationships and everyday social interactions (Ashraf et al., 2024).

The emotional impact can often be overlooked despite being an important part of living with the condition. Ashraf et al. (2024) explains that many people experience feelings of frustration, fear and uncertainty, particularly following diagnosis or during periods when blood glucose levels are difficult to manage. The authors also highlight that the continuous need to make treatment decisions throughout the day can contribute to diabetes related distress, which may affect emotional wellbeing and confidence in self-management.

For many people, managing diabetes becomes part of their everyday life. Balancing diabetes alongside work, education, family responsibilities and social activities often requires careful planning and constant decision making. Ashraf et al. (2024) suggest that the long-term demands of self-management can affect quality of life and make it more difficult for some people to maintain their emotional and social wellbeing. These findings highlight that living with the condition involves more than simply managing blood glucose levels alone and that its wider physical, emotional and social impact should also be recognised.

The impact of Type 1 diabetes also extends beyond the individual to family members and those providing regular support. As the condition often requires continuous self-management. Family members often become involved in monitoring blood glucose levels, recognising signs of hypoglycaemia, supporting insulin administration and adapting new daily routines. Hellman et al. (2026) found that these responsibilities can create emotional stress and anxiety for family members, particularly when they lack the knowledge or confidence needed to support someone living with Type 1 diabetes. However, the study also found that positive family involvement can improve self-management, emotional wellbeing and quality of life, highlighting the important role family support plays in promoting effective long-term diabetes management.

Health and Social Care Support for People with Type 1 Diabetes

Managing Type 1 diabetes is a lifelong commitment. Health and social care services play an important role in helping individuals manage their condition. NICE (2022) recommends that, following diagnosis, adults with Type 1 diabetes should receive an individualised care plan that considers their medical needs, lifestyle, emotional wellbeing and personal circumstances. This person-centred approach helps individuals develop the knowledge, confidence and practical skills needed to manage their diabetes effectively.

The care plan should include diabetes education, personalised dietary advice, support with insulin therapy, recognising and treating hypoglycaemia, regular follow-up appointments and annual reviews (NICE, 2022). These appointments give individuals the opportunity to discuss any concerns, review their progress and receive ongoing advice and support that is tailored to their individual needs. Adults should also be given information about local and national diabetes support services outside of routine healthcare appointments (Breakthrough T1D, 2025).

Providing this level of support usually involves a multidisciplinary health care team that work together to meet each person's individual needs (Breakthrough T1D, 2024). The team may include a GP, diabetes specialist nurse (DSN), endocrinologist, dietitian, podiatrist, ophthalmologist, pharmacist and psychologist. Each professional has a different role, but they work together to help individuals manage their diabetes and reduce the risk of complications while supporting both their physical and emotional wellbeing (Breakthrough T1D, 2024). Recent research by Hellman et al. (2026) also suggests that involving family members in diabetes education may reduce stress, improve confidence and strengthen the family's ability to support long-term diabetes management.

Conclusion

Type 1 diabetes is a lifelong condition that requires continuous self-management and ongoing support to reduce the risk of complications and maintain good health. As this report has shown, its impact extends beyond blood glucose control and can affect an individual's physical health, emotional wellbeing and daily life, as well as those closest to them. Living with Type 1 diabetes also requires individuals to adapt throughout different stages of life, making regular reviews and continued access to healthcare essential for managing the condition effectively. Regular monitoring, insulin therapy and person-centred care all play an important role in helping individuals live safely with the condition. Health and social care service, together with family support and diabetes education, can help people develop the knowledge and skills needed to make informed decisions about their health. Overall, a coordinated approach that combines medical care, education and ongoing support can improve long-term health outcomes and help individuals to live as independently as possible with Type 1 diabetes.

References

Ashraf, M.N., Cheng, A.Y.Y. and Robinson, D.J. (2024) *Emotional, Psychological, and Social Well-being Experience of Long-Term Living with Type 1 Diabetes Mellitus: A Patient–Psychiatrist–Endocrinologist Perspective*. *Diabetes Therapy*, 15(2), pp.317–323. Available at: <https://pmc.ncbi.nlm.nih.gov/articles/PMC10838889/> (Accessed: 6 July 2026).

Breakthrough T1D (2025) *Working with your healthcare team*. Available at: <https://breakthrought1d.org.uk/knowledge-support/managing-type-1-diabetes/working-with-your-healthcare-team/> (Accessed: 6 July 2026).

Chiesa, S.T. and Marcovecchio, M.L. (2021) *Preventing Cardiovascular Complications in Type 1 Diabetes: The Need for a Lifetime Approach*. *Frontiers in Pediatrics*, 9, 696499. Available at: <https://pmc.ncbi.nlm.nih.gov/articles/PMC8219852/> (Accessed: 6 July 2026).

Diabetes UK (n.d.) *Type 1 diabetes symptoms*. Available at: <https://www.diabetes.org.uk/about-diabetes/type-1-diabetes/symptoms> (Accessed: 5 July 2026).

Hellman, P., Aho, A.C., Gillrell, C., Wennick, A. and Axelsson, M. (2026) *Experiences of Family Members Supporting Adults With Type 1 Diabetes: A Qualitative Study*. *Science of Diabetes Self-Management and Care*, 52(1), pp.54–65. Available at: <https://pmc.ncbi.nlm.nih.gov/articles/PMC12796014/> (Accessed: 5 July 2026).

International Diabetes Federation (2025) *IDF Diabetes Atlas: Global Data*. Available at: <https://diabetesatlas.org/data-by-location/global/> (Accessed: 5 July 2026).

Manov, A.E., Chauhan, S., Dhillon, G., Dhaliwal, A., Antonio, S., Donepudi, A., Jalal, Y.N., Nazha, J., Banal, M. and House, J. (2023) *The Effectiveness of Continuous Glucose Monitoring Devices in Managing Uncontrolled Diabetes Mellitus: A Retrospective Study*. *Cureus*, 15(7), e42545. Available at: <https://pmc.ncbi.nlm.nih.gov/articles/PMC10460137/> (Accessed: 5 July 2026).

National Institute for Health and Care Excellence (NICE) (2022) *Type 1 diabetes in adults: diagnosis and management (NG17)*. Available at: <https://www.nice.org.uk/guidance/ng17> (Accessed: 3 July 2026).

National Institute for Health and Care Excellence (NICE) (2025) *Diabetes – type 1: How common is it? Clinical Knowledge Summaries*. Available at: <https://cks.nice.org.uk/topics/diabetes-type-1/background-information/prevalence/> (Accessed: 3 July 2026).

NHS England (2024) *Treatment for type 1 diabetes*. Available at:
<https://www.nhs.uk/conditions/type-1-diabetes/treatment/> (Accessed: 3 July 2026).

World Health Organization (2024) *Diabetes*. Available at: <https://www.who.int/news-room/fact-sheets/detail/diabetes> (Accessed: 3 July 2026).