A GP's Perspective – Embracing CGM for people with Type 2 diabetes on multiple daily insulin injections

More than 34,000 people in Gloucestershire are living with Type 2 diabetes, one of the fastest growing healthcare issues in the UK. The impact of diabetes on the NHS is significant. Nationally, it costs the NHS £1.5m every single hour – around 10% of the entire NHS budget¹.

In June 2022, the National Institute for Health and Care Excellence (NICE) published a set of updated guidelines making glucose sensors available to selected people with Type 2 diabetes who are administering multiple daily injections of insulin².

This enabled Integrated Care Boards (ICBs) across the country to introduce continuous glucose monitors (CGMs) for eligible people living with Type 2 diabetes, giving them greater control over their condition.

Dr Ruth Kelly, MB ChB MRCGP, is a GP in Gloucester, with a special interest in diabetes care. She leads a quarterly education group designed for GPs and practice nurses involved in diabetes care. Over the past three years, she has served as the practice lead for research and is a member of the NIHR's health needs panel for diabetes in the South West of England.



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Dr Kelly believes that people living with diabetes should have equal access to newer treatments and technologies, including CGMs such as the FreeStyle Libre 2 system³, as it gives immediate and personalised results which can be actioned by the individual straightaway.

Dr Kelly works across three practices in the area, including Culverhay Wotton, Frampton on Severn and Berkeley. Within these practices, there are a total of 1,122 people living with Type 2 diabetes – roughly 35% manage through diet and lifestyle changes, 50% are on medication, and 15% take insulin to manage the condition.

IDENTIFYING AND INITIATING PATIENTS ELIGIBLE FOR DIABETES TECHNOLOGY

Following updated NICE guidelines in 2022 and local policy in April 2023, Ruth began to proactively search for people with Type 2 diabetes who were now eligible for a CGM to ensure it could be offered equitably. A total of 116 potential eligible people who were receiving medical support within these GP practices were identified.

As part of the process to identify people for a CGM, Ruth first identified patients who were on rapid acting insulin. As a result, she shortlisted 67 people who were eligible to receive access to the technology, placing a note on their file to offer the individual a CGM during their next review, if they hadn't been started prior to that. The next stage was to carry out a search for people using basal or premix insulin, who also met NICE's eligibility criteria.

Once the practice became more confident with starting and monitoring CGM, Ruth texted any previously identified individuals not already started, a link to Abbott's self-starter training. This involved the patient ordering a free starter kit to their home address and watching a short 20-minute training video. This worked well for the majority of patients, as people could be started from home in their own time and in some cases, families were also on hand to support. However, for a small number of people who needed starting in person, this was done in practice by the clinical team or Abbott trainers if needed.

HOW CGM IS IMPROVING KEY CLINICAL OUTCOMES

A recent real-world study demonstrated that people living with Type 2 diabetes managed with multiple daily injections experienced a reduction of HbA1c level of 11mmol/mol at 3-6 months, following the initiation of Abbott's FreeStyle Libre system⁴, aligning with Dr Kelly's observations in clinic.

Ruth said: "Anecdotally, across the practices we've seen that patients using a FreeStyle Libre 2 system have an average reduction of HbA1c level of 13mmol/mol, over a period of 3-6 months.

"We've also seen improvements in glucose levels and Time in Range, and reduced episodes of hypoglycaemia and the overall burden of diabetes management for the patients. There's also an element of increased safety for some of our most vulnerable patients. For example, the first person with Type 2 diabetes we started on a CGM was previously calling an ambulance as often as twice a week and being admitted to A&E with diabetic ketoacidosis or frequent hypos/hypers.

"However, during the first three months of using a CGM, she didn't need to go to A&E once. By giving her access to this diabetes tech, she was able to check her levels more frequently, whilst also sharing this information with her family who could remotely support her by accessing her glucose data and alarms through the LibreLinkUp app⁵.

"Some of our most complex cases are in the community, and a CGM can really help with remote monitoring for elderly people living in care homes or with dementia, and people with learning disabilities – supporting a holistic approach towards care in the community, and with the potential to reduce hospital admissions."

CGMs offer significant benefits not only to individuals and their families but also provide substantial value and cost savings to the NHS. For example, the cost of a single hypoglycaemic hospital admission, according to the NHS Tariff 2022/23, is $\pounds2,636$ —nearly three times the price of a full year's supply of CGM⁶.

HOW DIABETES TECH CAN OFFER LONG-TERM BENEFITS TO PATIENTS AND PRACTICE

According to Dr Kelly, GP practices can also experience significant benefits by encouraging eligible patients to use continuous glucose monitoring (CGM) devices. One of the primary advantages is that people with diabetes can manage their condition more independently, reducing the need for frequent doctor visits. With CGM, patients have the tools for better selfmanagement, leading to improved glycaemic control without the constant need for in-person consultations.



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She said: "Some GPs worry that initiating and managing patients on CGM will create additional workload and more frequent reviews. In reality, it takes no longer than starting someone on finger prick testing, and the information it provides patients with enables them to change habits and behaviours, leading to better overall outcomes.

"Making use of platforms such as LibreView", healthcare professionals can remotely monitor patients' glucose levels and prioritise a more tailored approach to their diabetes care. By accessing data remotely, they can make decisions about which patients need more support and attention, saving time for both patients and GPs.

"For example, I can review the data on LibreView and identify if someone requires adjustments, like reducing background insulin, and simply text them a new management plan. This approach not only improves glycaemic control and reduces emergencies from hyper - or hypoglycaemia but also leads to more meaningful and focused appointments. Patients often express how life changing CGM has been for them, leading to happier, healthier outcomes." "Working in primary care, I quickly adapted to how CGM operates. After attending a training session, I felt confident in how to use the FreeStyle Libre 2 system and reviewing patients' data. The more you work with it, the more comfortable you become. There's no doubt that primary care is under pressure, with issues like underfunding and staff shortages, and some GPs view the initiation of CGM as something that belongs in secondary care. This is well and truly a thing of the past, which is reflected in local prescribing guidelines, and there is lots of help in the form of training and support from the likes of Abbott to make the process very quick, easy and efficient."

In addition to having access to continuous glucose data to really understand the trends of each individual patient, the clinical team has also been able to interpret CGM data to understand how insulin works.

Ruth said: "The data has really enabled us to review the impact insulin can have, for example, it has shown us that some patients need to take rapid acting insulin 30 minutes before a meal rather than 10 minutes. We can also see the effects of switching to ultra rapid acting insulin, allowing us to optimise people's insulin in a way we'd never be able to without it.

- "Diabetes technology offers personalisation, helping individuals manage their condition while keeping up with the demands of modern life. With most aspects of our lives integrated into our phones—like calendars and other essential apps—it's important to stay up to date with advancements in healthcare technology as well.
- "CGMs also provide safety features such as hypo alarms, which can be essential when supporting frail or vulnerable people, allowing family members and healthcare professionals to monitor their wellbeing.
- "Beyond the clinical benefits, diabetes tech significantly reduces the emotional burden and burnout associated with managing the condition. It enhances quality of life by making diabetes management easier and less intrusive on day-to-day living. Even without considering the direct health benefits, the improvement in convenience and mental wellbeing for the patients is evident."



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CGM=continuous glucose monitoring.

1. NHS Gloucestershire Integrated Care Board, Over 3,000 Gloucestershire people tackle diabetes through positive lifestyle changes (2022) available at: https://www.nhsglos.nhs.uk/media/ blogs/over-3000-gloucestershire-people-tackle-diabetes-through-positive-lifestyle-changes/ (Last accessed November 2024). **2.** NICE guideline (NG28) Published: 02 December 2015 Last updated: 29 June 2022; Type 2 diabetes in adults, https://www.nice.org.uk/guidance/ng28 (Last accessed November 2024). **3.** FreeStyle Libre 2 and Libre 2 Plus sensors are compatible with FreeStyle LibreLink app and FreeStyle Libre 2 reader, the FreeStyle Libre 2 system has option glucose alarms, to receive alarms notifications, alarms need to be turned on and the sensor is kept within 6 meters unobstructed of the reading device. The FreeStyle LibreLink app is only compatible with certain mobile devices and operating systems. Please check the website for more information about device compatibility before using the app. Sharing of glucose data requires registration with LibreView. **4.** Adamson K, et al. Flash Glucose Monitoring is Associated with HbAc Improvement in Type 2 Diabetes Managed with Multiple Daily Injections of Insulin in the UK: A Retrospective Observational Study. Diabetes Ther. 2024;15(1):2109-2118. https://doi.org/10.1007/ s13300-024-01629-z (Last accessed November 2024). **5.** The LibreLinkUp app is only compatible with certain mobile devices and operating systems. Please check www.librelinkup.com for more information about device compatibility before using the app. Use of LibreLinkUp requires registration with LibreView. The LibreLinkUp mobile app is not intended to be a primary glucose monitor: home users must consult their primary device(s) and consult a healthcare professional before making any medical interpretation and therapy adjustments from the information provided by the app. **6.** NHS England, National tariff payment system documents/ (Last accessed November 2024). **7.** The LibreView data management software is intended for us

CGM IN PRIMARY CARE