



Digital Solutions Case Study:

Implementing digital in the management of diabetes in primary care

Cost and workforce pressures, as well as the growing demand for services, are driving the need for digital technologies in primary care.

This case study from a GP practice in North London, illustrates the practicalities of implementing digital health solutions, with digital inclusion in mind, to help patients to have the access, skills, and confidence they need to benefit from them.

Key challenges facing the practice that led to adopting digital solutions

- To help combat workforce pressures
- > To provide patients with easier access to care
- > To provide more dynamic monitoring of patients
- > To help increase patient self-management of diabetes
- > To help overcome population-based challenges such as language barriers, cultural challenges and digital literacy

"We have fewer people managing a growing number of relatively high-risk patients. Once you add in the complexity of barriers to patient self-management, such as language barriers and communication, you have a perfect storm of diabetes management challenges, which we hope digital technology can help with." GP Partner

Key results: after introducing the mySugr® app and RocheDiabetes Care Platform



Patients report feeling more engaged with their diabetes self-management



Improved access to accurate real-time blood glucose data

- Increased HCP confidence in making clinical decisions
- Increased knowledge of individual patient circumstances leading to more personalised care
- Helped to identify hypo safety concerns



Capacity was improved through patient / population risk stratification

How digital was implemented at this practice



What

- Patients placed on the Accu-Chek® Instant blood glucose meter with the mySugr app and connected to the RocheDiabetes Care Platform
- The cohort included patients with type 2
 diabetes without moderate or severe frailty



Who

- GP Partner ran searches and decided which patients to focus on
- Senior Clinical Pharmacist with an interest in diabetes managed the platform on a day-to-day basis
- Practice reception manager coordinated patient activities



How Roche supported implementation

- As the patient cohort included patients with language barriers, a structured face-to-face clinic for connection of RocheDiabetes Care Platform and mySugr was delivered
- Letters were sent to patients advising them what to bring to the appointment and what to do before coming into the clinic
- When required, follow-up telephone support was provided



Data

The team focused on the following patient data:

- > Safety thresholds e.g. hypo events
- How many times the patients had checked their blood glucose levels based on the advice the GP had given them
- Measurements in range

mySugr app

- All your patients important diabetes data in one place, their smartphone
- Estimated HbA1c, Bolus Calculator, motivating challenges, and much more
- Available in 24 languages
- Connecting Accu-Chek Instant
 with mySugr* improves glycaemic
 management and helps reduce HbA1c¹



RocheDiabetes Care Platform

- A cloud-based interactive diabetes management platform
- Brings together diabetes relevant information including blood glucose and insulin data from various devices within a single solution
- > Real time seamless data transfer



Visibility of data gives confidence that the patient is under control

Aged 65, has LADA, under the care of a hospital diabetes clinic

Prior to digital solutions

The patient's HbA1c was stable, their self-reported blood glucose readings were 7-8 mmol/L

"His HbA1c has been only a little out of range but having a clear idea of when his spikes were was the most useful bit to me from a clinical perspective." GP Partner

Results following onboarding to digital solutions

- Using technology, the patient's measurements in range increases from 62% to 81%, alongside increased blood glucose monitoring
- The patient reports that they think the mySugr app is 'great' and reports feeling far more engaged now than ever before
- The patient finds the colours in the app help them understand their readings and their relationship with food
- With visibility of this data, their GP has confidence that the patient's diabetes is well managed
- As this patient requires limited intervention from the GP, the practice can focus on interventions with other patients

Patient example 2:

Hypo risk now highlighted with RocheDiabetes Care Platform

Aged 52, type 2 diabetes, on insulin, English isn't first language

Prior to digital solutions

The patient was self-reporting their blood glucose readings with no reported hypos

"The patient didn't come to us reporting hypos, we spotted these because we had this technology in our hands. These hypos wouldn't have been apparent to us without this technology." GP Partner

Results following onboarding to digital solutions

- The GP found significant number of hypos, at one point patient's blood glucose was low 100% of the time, of these 56% of blood glucose measurement were very low (less than 3.0mmol/L)
- The patient was then called in by the GP for a full face-toface review and medication adjusted
- Following this appointment, the patient's blood glucose readings improved, with their measurements in range 64% of the time, with only 35% of these measurements being low
- Technology has allowed the GP to change how they monitor this patient and has given them awareness of hypos

Patient example 3:

Patient's self-management has improved following onboarding

Aged 73, type 2 diabetes, English isn't first language

Prior to digital solutions

The patient measures blood glucose on average 0.7 times a day

"Having visibility of the data has allowed us to realise that the patient is having evening spikes with his blood glucose, which we can now discuss with him and provide appropriate advice."

GP Partner

Results following onboarding to digital solutions

- The patient reports that the app gives them a better understanding of their relationship between food and their blood glucose readings
- > The patient increases blood glucose measurements to three times a day over the course of a year
- > From visibility of the data, the GP can see that measurements in range are lower than we would expect, given the patient's HbA1c results
- Having this view of the patient's data allows their GP to have more meaningful conversations with the patient and provide tailored diet and lifestyle advice

Key recommendations on implementation from a primary care practice in North London

- 1
- Consider who in your practice is involved
- Involving at least three people is helpful one to have oversight, one to run the technology and one to coordinate patient logistics

- 2
- Consider the patient cohort you select
- > There is a window of opportunity for patient engagement, introducing digital at this time can help to shape their diabetes self management
- For engaged patients this technology could reduce the amount of times they visit the practice
- Disengaged patients, at a higher risk of developing complications, may require significant time investment, but the impact of digital for those patients could be huge
- Consider patients with access to compatible tech
- > Don't make assumptions based on a patient's digital literacy, age, ethnicity etc.
- Consider how you communicate to patients
- > The practice saw an 86% attendance rate to their RocheDiabetes Care Platform clinic, in their cohort of largely disengaged patients
- Make the benefits of the digital solutions clear to the patient to help increase engagement
- By sending a letter detailing key points to patients, and making a preappointment telephone call, patients were clear on why they were attending the clinic
- Consider a protocol for using the system
- By determining how frequently you will review the data and what action you will take you can manage expectations within the clinical team and with the patient
- > Consider regular meetings to assess the platform and data
 - » The practice reviewed data monthly, identifying patient trends and making assessments of whether to bring the patient in earlier, shortening the gap from review to review in patients who need an intervention

"Not only does your confidence in making clinical interventions improve but you have the opportunity, should you wish, to share the management plan with the patient to titrate their insulin independently." GP Partner

The lifestyle images included in this article is a stock photo used for illustrative purposes only. Abbreviation: GP, General Practitioner; LADA, Latent Autoimmune Diabetes of Adults Quotations sourced from recorded interviews with a GP with special interests in diabetes, managing partner, as part of a consultancy agreement with Roche Diabetes Care in 2023.

1 The mySugr logbook is licensed for people with diabetes over the age of 18 years. The mySugr Bolus Calculator is licensed for people with diabetes over the age of 18 years.

1 Lide C, et al. Real World Data analysis shows a significant improvement in glycaemic management when using a blood glucose monitor connected with a mobile health application in UK users with Type 2 Diabetes. Diabetes UK Professional Conference Poster Session, Liverpool, 26-28 Apr 2023, Poster 198

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