

# Adapting provision of structured diabetes education from face-to-face to virtual during the COVID-19 pandemic

Rose Butler, Joannah Griffey, Caroline Mayles, Laura Parbery-Gray, Laura Rockett

**In Bedfordshire, individuals newly diagnosed with type 2 diabetes are referred to the diabetes education team for either a group or one-to-one structured education session. The DESMOND Newly Diagnosed Programme is delivered to groups to support people to self-manage their condition through lifestyle modification and behaviour change. Prior to the COVID-19 pandemic, all options for structured education were in-person only. However, when the pandemic hit in March 2020, all face-to-face patient education sessions were immediately cancelled. As the initial three-week lockdown became an extended period, the Bedfordshire diabetes education team had to think how to continue to provide diabetes education and support to its patients whilst working within government guidelines and restrictions. This article describes how the team successfully moved its educational options from an entirely face-to-face provision to a virtual service and details the service's post-pandemic plans.**

There are currently 4.4 million people living with type 2 diabetes in the UK. Provision of structured diabetes education around the time of diagnosis, and with annual reinforcement and review, is an integral aspect of care to support patient self-management (NICE, 2015).

Bedfordshire Integrated Community Diabetes Service (ICDS) has provided specialist community diabetes care across Bedfordshire since 2012. From inception, the ICDS has offered patients structured, evidence-based, group diabetes education sessions. In 2017, Clinical Commissioning Group funding was secured by the ICDS to create a specialist diabetes education service as part of the NHS Treatment and Care Programme. The diabetes education team was commissioned to provide group and one-to-one structured education sessions specifically for individuals diagnosed with type 2 diabetes in the past 12 months. ICDS specialist nurses and dietitians continued to provide education for

patients who had lived with type 2 diabetes for more than 12 months, in the form of either the Diabetes Education and Self Management for Ongoing and Newly Diagnosed (DESMOND) course or an in-house structured education course, Advanced Diabetes Awareness and Management (ADAM).

ADAM covers similar ground to the DESMOND Foundation course but also includes sessions delivered by a podiatrist and representatives of the local health and wellbeing team. The North Bedfordshire ICDS team is currently working towards [QISMET accreditation](#) for the ADAM course. The plan is to offer ADAM across Bedfordshire to all patients who have been diagnosed with type 2 diabetes for more than 1 year.

## Pre-pandemic

Prior to the pandemic, the education team delivered whole-day, face-to-face group DESMOND

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## Article points

1. Despite the restrictions of the past two years, the Bedfordshire diabetes education team has continued to support individuals newly diagnosed with type 2 diabetes, providing structured diabetes education and relevant information via telephone and virtual platform sessions.
2. Challenges have primarily been technical in nature; however, running technical checks with attendees prior to remote learning sessions can minimise issues.
3. Offering patients a choice of face-to-face, remote, group and one-to-one sessions, as well as providing invitations by telephone and mail, can increase uptake of structured education.

## Key words

- Coronavirus
- Remote care
- Structured education
- Type 2 diabetes

## Authors

Author information can be found on page 2.

**Box 1: Wellbeing call case studies.**

**Sheila** reported that her practice nurse had telephoned to let her know that she had been diagnosed with type 2 diabetes. Sheila then received a prescription of metformin via her pharmacy. Assuming that metformin treatment was like an antibiotic and that only a single prescription was required, Sheila finished the four-week supply but had not understood that the therapy would likely need to be ongoing. The educator was able to explain how metformin worked and why it had been prescribed, and encouraged Sheila to contact her surgery to request her repeat prescriptions.

**Andrew** had also been informed by telephone of his new diagnosis. He mentioned during the call with the diabetes educator that he knew he could be at risk of serious health complications, including blindness and amputation, and that he now felt very depressed as a result. Andrew had also been told to collect a prescription from his pharmacy. Unfortunately, he found that metformin caused him severe diarrhoea and so had stopped taking it. The educator discussed with Andrew his feelings around his mental health, signposted him to the Bedfordshire Wellbeing service and encouraged him to request a diabetes medication review at his practice, explaining that there were alternative medications available.

sessions on weekdays and Saturdays across the Bedfordshire area, excluding Luton (which is served by Luton ICDS). Patients of South Asian origin were offered the option of attending either DESMOND or a locally developed, culturally specific group education session. These sessions were held in community locations accessible to the local South Asian community and supported by two educators, one of whom has multilingual South Asian language skills.

The team also developed a structured education session designed to last approximately two hours, to be delivered in a patient's own home for those who were unable to attend group settings. Those eligible for a home education visit included those who had a learning disability, mobility difficulties, or a hearing or sight impairment.

### COVID-19

On 11 March 2020, the World Health Organization declared COVID-19 a pandemic. In the UK, the first lockdown was initiated on 23 March, and the education team immediately cancelled all planned face-to-face sessions for the following month. Patients already booked to attend were contacted to inform them that their course or one-to-one session would be rearranged as soon as possible.

In early May 2020, with the extension of the first lockdown, the team's educators started contacting patients on the waiting lists to let them know

that dates would be offered once lockdown was lifted and to ask if they had any questions. The most vulnerable groups were called first and then prioritised in descending order of age. Once the backlog had been cleared, calls then continued as patients were referred into the service.

During these calls, some individuals reported that, due to lockdown, they had been given their type 2 diabetes diagnosis over the phone by their healthcare professional. Some felt that little or no further information about diabetes had been provided at that time, and they used the call to ask questions about managing their newly diagnosed condition. Gradually the educator calls became "diabetes wellbeing" calls. People isolated at home during lockdown mostly seemed grateful for the opportunity to be able to talk to someone. Examples of these wellbeing conversations are shown in *Box 1*.

The Diabetes UK booklet *Everyday Life with Type 2 Diabetes* was posted out to all patients who were contacted, and a login to the interactive, web-based MyDESMOND portal (see [Northern et al, 2021](#) for more information) was offered to those patients who had access to appropriate IT and expressed an interest in online self-learning.

Patients were asked during these calls if they would like to receive a more formal diabetes education call, specifically to help them learn more about self-management of type 2 diabetes. The response was overwhelmingly positive.

### Structured education calls

Using the material developed for the pre-pandemic home visits for structure and consistency, in July 2020 the team commenced providing two-hour diabetes education sessions via telephone for individual patients. A printed booklet ([Appendix 1](#)) summarising the information to be covered in the telephone call was sent to the patient, and during the call the educator guided the patient through the booklet material, with ample opportunity for questions as they arose.

Our South Asian language-speaking educator offered individual patient telephone calls in either Hindi, Urdu or Punjabi.

By September 2020, the team was able to offer the structured education calls via both telephone and NHS Attend Anywhere to those patients who had access to suitable video technology.

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GP practices in the Bedfordshire area were kept updated about the services the diabetes education team could provide as the service evolved. A clear referral pathway (Figure 1) is provided for GPs and practice nurses to refer patients for structured education. Patient self-referrals are also accepted.

### Virtual DESMOND groups

Between September and December 2020, the education team continued to provide telephone- or video-based, one-to-one educational calls. With the national release of the first set of virtual DESMOND slides in January 2021, the team practised delivering virtual DESMOND group sessions by trialling with a panel of individuals from the local Diabetes UK support group. We found that the NHS Attend Anywhere platform was unable to host groups of more than four people; however, Microsoft Teams could support larger groups and was approved by the Trust's information governance department as an appropriately secure platform.

Our first virtual DESMOND course was delivered to patients in February 2021 over three 2-hour sessions via Microsoft Teams (Figure 2), with each session held at the same time and day on consecutive weeks. Evening virtual sessions were also offered but in a format of two 3-hour sessions. Finding that the 2x3-hour structure worked well, the daytime virtual courses were also moved to this format.

The team found that technical checks with each patient via Microsoft Teams prior to the course date helped troubleshoot any technical issues that the participants might have encountered on the day of the actual course, thus ensuring that the virtual courses start on time and mostly without technical hitches.

### Referrals and attendance

All patients were invited to opt in to the service by letter, and many were also telephoned as well. Between July 2020 and November 2021, the team delivered 90 one-to-one structured patient calls via telephone, as well as 23 via video between September 2020 and the end of November 2021. In the period of February–November 2021, 19 virtual DESMOND courses have been delivered to groups of 3–6 patients. Thirty seven percent of patients

## EXPANDED SERVICE FOR STRUCTURED EDUCATION FOR PEOPLE DIAGNOSED WITH TYPE 2 DIABETES

**Our aim is to ensure that all people diagnosed with Type 2 diabetes have the necessary tools to be able to effectively self-manage their condition.**

To do this effectively, individuals need to have a better knowledge of Type 2 diabetes. Structured education for Type 2 diabetes allows the person to understand their condition and then, with confidence, develop the necessary skills to take control of their diabetes and successfully manage their condition.

Structured education in a group setting has been shown to be the most effective way to deliver diabetes education. However we are aware that some people are not suitable for a group setting due to more complex needs. We are now able to offer one-to-one education for those that are not suitable for a group setting.

**ANYONE DIAGNOSED WITH TYPE 2 DIABETES SHOULD BE ENCOURAGED TO ATTEND THE RELEVANT SESSION BELOW. PLEASE ADVISE INDIVIDUALS THAT ATTENDING STRUCTURED DIABETES EDUCATION IS A VITAL PART OF THEIR TREATMENT PROGRAMME.**

Diagnosed <12 months

DESMOND

Face to face or virtual group options and also MyDESMOND online learning

GROUP CRITERIA

Individuals must be able to attend a group face to face or virtual group setting

MyDESMOND

learn online at home at your own pace

Diagnosed <12 months

One to One Education

Telephone, videocall or a face to face home visit

For individuals newly diagnosed with Type 2 diabetes for less than 12 months

This can only be offered in exceptional circumstances

Please advise individuals that they or their carer will be phoned to assess their needs prior to an appointment being made

Diagnosed >12 months

ADAM

Advanced Diabetes Awareness and Management

Face to face groups and also MyDESMOND online learning

For those who have lived with Type 2 diabetes for more than 12 months

GROUP CRITERIA

Individuals must be able to attend a group face to face setting

MyDESMOND

learn online at home at your own pace

Diagnosed <12 months

Hindi, Urdu or Punjabi speaking individuals we offer a three hour face to face diabetes group session in their own language

Figure 1. GP information and referral pathway.



Figure 2. An online education session.

**Box 2. Structured education options July 2020–Nov 2021.**

- MyDESMOND
- DESMOND virtual
- 1-2-1 educational telephone or video call
- South Asian language educational telephone call

referred to the service between July 2020 and November 2021 attended a structured education option, 7% were in the process of choosing an option in November 2021 and the rest either had not responded, did not attend or had declined the service. *Figure 3* illustrates the educational options chosen by those who opted for referral.

Telephoning patients to discuss the available educational options (*Box 2*) improved service uptake. Some patients were keen to accept the offer, while others required some explanation and counselling. Common responses from those declining to participate included: “I know a lot about diabetes; my mother had it”, “My wife has diabetes; we eat healthily”, “I’m too busy to attend” and “I don’t think it’s for me”.

**Challenges**

Challenges have typically been of a technical nature. On one occasion, Microsoft Teams failed across the Trust, and neither educator was able to join the virtual call, where six patients and an observer were waiting to join the session. Another time, despite successful pre-course technical checks, while the educators could join the virtual session, most of the patients were unable to. The only patient who did join was a passenger in a car travelling up the M1 motorway. The course was rescheduled!

One patient was under the impression that our educator was a cold caller trying to initiate a scam. It transpired that this particular individual had a YouTube channel showing videos of him stringing “scammers” along. He had started to record the encounter until he realised that our educator was making a genuine call about his recent diagnosis.

**Observers**

Observers including GPs and practice staff are invited to attend our virtual courses. To date there has been a renal dietitian, a student dietitian, a new member of the education team, a Primary Care Network care coordinator and two students researching dissertations on long-term health conditions.

**Educator accreditation**

One of our educators has been assessed and has passed their DESMOND educator accreditation via the virtual platform, with the assessor attending virtually along with the patients.

**Patient feedback**

Of 62 respondents who attended a DESMOND virtual course, 97% agreed that the course had been either useful or very useful in helping them to self-manage their diabetes. The remaining 3% did not give an opinion. *Box 3* (overleaf) gives a selection of patient feedback comments.

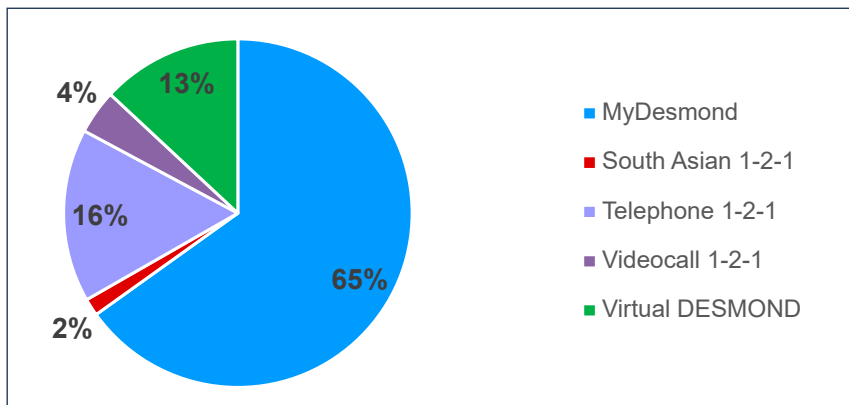
**Signposting**

Participants are signposted at the end of a call or virtual course to appropriate local services. These include [MoreLife](#), [Bedfordshire Wellbeing](#) and our Trust’s virtual weight management course for people with type 2 diabetes, Eat Smart Keep Active (ESTA). Virtual and face-to-face exercise opportunities in the Bedfordshire area are signposted and reliable online sources of health information, such as [Diabetes UK](#) and the [British Heart Foundation](#) websites, are recommended.

**Plans in 2022**

At the time of writing (January 2022), the team is planning to return to face-to-face DESMOND courses, with appropriate social distancing and hygiene measures in place. The team’s long-term vision is to ensure all patients newly diagnosed with type 2 diabetes are able to access structured education adapted to their needs.

Once face-to-face courses and home visits are reinstated, the education team will continue to offer a hybrid mixture of both in-person and virtual course options. Verbal feedback has shown that virtual education suits those patients who would not attend a group in person.



*Figure 3. Choices made by patients opting in July 2020–November 2021.*

**Box 3. Sample feedback from patients who attended a DESMOND virtual course.**

“Welcome exchange from ‘you are now diabetic and that’s it’ to having someone who understands the condition and gives clear information, good guidance, medically and food-wise. How to try to improve the condition. Excellent service. Very worthwhile.”

“The educator made me and my wife feel like someone actually cared and was willing to listen at a pace me and wife could understand, thank you for your help and understanding.”

“Only to say that the two educators were some of the best facilitators/educators/trainers that I think I’ve ever experienced. It is one thing to be an expert in your field, but that doesn’t always transfer well in a ‘training’ environment and these sessions were fabulously supported. I’m usually really shy and hide away from interactive type sessions, however, the knowledge, patience, compassion, encouragement, and inclusivity from both was amazing – they made it a pleasure to learn, made it easy and comfortable to share personal examples and questions and they both seemed genuinely passionate about the sessions which in turn made me want to engage much more. Thank you!!”

Patient engagement following referral continues to be a challenge. To increase uptake of the service, the team will continue to call referred patients to explain the available options as well as sending letters of invitation, including an introductory leaflet about DESMOND. The personal calls have noticeably increased the likelihood of patients opting into the service.

Despite the restrictions of the past 22 months, the entire team is proud to have been able to continue to support those newly diagnosed individuals who opted into the service with structured diabetes education and relevant information via telephone and virtual platform sessions. Many of the patients we have educated will now be a year or more into

their journey with type 2 diabetes and eligible to attend a DESMOND or ADAM structured education course. We very much hope that they will take up these opportunities when available. ■

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**Read more online**

**The role of digital diabetes education (MyDESMOND) during the COVID-19 pandemic**

How this structured education programme for people with type 2 diabetes has been adapted for online use, and its outcomes since the start of the pandemic.

*Diabetes & Primary Care* **23**: 97–9

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