The QiC Diabetes programme has been made possible with sponsorship from Sanofi. Sanofi has had no editorial control over any of its contents.
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Prevention, diagnosis and treatment of diabetes in the UK have never been more important, with the prediction that almost one in 10 people in the UK are likely to have diabetes by 2030, impacted by disturbing levels of obesity, causing the increase in Type 2. Diagnosis of diabetes have doubled in the past 15 years, putting millions of Britons at risk of the many complications connected with Diabetes.

Therefore, with the pressure on the NHS increasing and financial constraints growing, there has never been a better time to recognise and share good practice that improves patient outcomes and drives efficiency.

Launched in 2011, Quality in Care (QIC) Diabetes exists to recognise, reward and share good clinical practice across the UK and highlight the vital contribution made by local teams and individuals.

The programme could not happen without the help and dedication of a large number of people and organisations - our thanks to you all.

Particular recognition is due to the Association of British Clinical Diabetologists (ABCD), Association of Children’s Diabetes Clinicians (ACDC), Diabetes Psychology Network, Diabetes Research & Wellness Foundation (DRWF), Diabetes Specialist Nurse Forum (DSN) UK, Diabetes UK, the Diabetes Inpatient Specialist Nurse (DISN) UK Group, JDRF the type 1 diabetes charity, The National Children and Young People’s Diabetes Network (CYPDN), Primary Care Diabetes Society (PCDS), Training Research and Education for Nurses in Diabetes (TREND) Diabetes, the United Kingdom Clinical Pharmacy Association (UKCPA) and the Young Diabetologists and Endocrinologists’ Forum (YDEF) - and, of course, this evening’s hosts Sanofi.

Thanks also go to all of you who have entered this year’s programme. Congratulations to all our finalists and good luck!

Further information about the programme, its judging process and how to enter can be found at www.qualityincare.org
Continuing to go beyond generalisation and the expected in Diabetes Management.
Sanofi is proud to be the sponsor of QiC Diabetes and support this programme to continue working hard with those who are dedicated to developing diabetes care.
We are committed to helping improve the health and well-being of people with diabetes.
Our goal is to not only develop innovative solutions which could help people with diabetes to live as people, not as patients but also relieve the burden on the NHS by helping with our medicines and solutions to prevent symptoms worsening or complications arising from chronic conditions such as diabetes.

“I am very pleased to welcome you all to 2021 QiC awards. We are very proud to be supporting the QiC awards again this year which is an initiative we firmly believe is a vital way of highlighting and sharing some of the fantastic projects you and your colleagues have developed to benefit people with diabetes. With the challenges that we have all been facing this year it has even become more important to share best practices across the NHS and we are honoured to facilitate the sharing of ideas and projects developed by you and your colleagues. People are the key element of any inspirational change in the organisations and therefore it is of huge importance to commend and recognise the achievements of those that work in the NHS and whose passion and drive make these projects live and breathe. It is important to take this opportunity to recognise your hard work, achievements and we hope you have a successful and enjoyable evening.”

Jessamy Baird
General Manager, General Medicines BU
Country Lead, Sanofi UK & Ireland
Judging Leads

SIMON O’NEILL
Director of Health Intelligence and Professional Liaison Diabetes UK

DR PARU KING
Consultant Physician Derby Hospitals

DR MARC ATKIN
Consultant Diabetes & Endocrinology Royal United Hospital Bath NHS Trust

ALISON BARNES
Associate Research Dietitian / Lecturer in Human Nutrition & Dietetics at Newcastle University/Lead Dietitian at Changing Health

ABIGAIL BURRELL-RANN
Senior Community Engagement Officer, JDRF UK

DR WUI HANG CHEUNG
Consultant Diabetologist, Clinical lead for Inpatient Diabetes Care Service, Norfolk & Norwich University Hospital NHS Foundation Trust

TAMSIN FLETCHER-SALT
Clinical Diabetes Nurse Specialist, Royal Stoke University Hospital

DR NAJAF HAIDER
Consultant Physician, Portsmouth NHS

DR CLARE HAMBLING
GP and Chair PCDS

CLARE HOWARTH
Diabetes UK Head of North of England, DUK Head of North of England

SALLIANNE KAVANAGH
Diabetes Specialist Pharmacist, University of Huddersfield

LISA KING
Lecturer in nursing (Diabetes) at Ulster University

MICHELLE LAM
MRPharmS, MScClinPharm, IPres, FHEA Diabetes Specialist Pharmacist, Senior Clinical Pharmacist West Merton Primary Care Network Lambton Road Medical Practice

JULIE LEWIS
Primary Care Diabetes Nurse Consultant, North Wales

DR DAVID LIPSCOMB
Consultant in Diabetes, Diabetes Care for You, SCFT

ANGELA MITCHELL
Diabetes UK - Diabetes Scotland National Director, Diabetes UK - Diabetes Scotland

ANUJA NATARAJAN
Paediatric Endocrinologist, Doncaster and Bassetlaw Teaching Hospitals

DR JULIA PLATTS
National Clinical Lead for Diabetes in Wales

JO REED
Renal/ Diabetes Clinical Nurse Specialist, Imperial NHS Trust and Member of the Diabetes Inpatient Specialist Nurse (DISN) Committee

REBECCA REEVE
Head of Professional Relations, General Medicines Sanofi UK & Ireland

DR FIONA REGAN
Consultant Paediatrician, Frimley Health NHS Foundation Trust

DR SAM RICE
Consultant Physician and Endocrinologist based in West Wales

PETE SHORRICK
Diabetes UK Midlands and Eastern Regional Head

DR ROSE STEWART
Principal Clinical Psychologist, Betsi Cadwaladr University Health Board

HANNAH SYED
Diabetes Lead Pharmacist, East Sussex Healthcare Trust

CANDICE WARD
Lead CDEP Educator and CamAPS FX Training & Outreach Manager, Cambridge Diabetes Education Programme (CDEP), Cambridge Diabetes Education Programme

DEBBIE WOODS
Sanofi UK and Ireland Head of Medical for the General Medicines Division

JUDGING LEADS AND JUDGES

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Dr Paru King
Dr Marc Atkin

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www.qualityincare.org/awards/diabetes
SUMMARY
The Diabetes 101 project is a virtual diabetes MDT service, set up on Twitter in March 2020 in response to the COVID-19 pandemic and first national UK lockdown. At this time people living with diabetes were extremely anxious. Misinformation was a problem, and capacity in specialist diabetes teams was overwhelmed. The account disseminated reliable information, stability and support to people living with diabetes. It was staffed voluntarily by 19 multi-disciplinary healthcare professionals. The account has more than 6,000 followers, with resources shared around the world. Novel formats of education delivery have been successfully trialled and a website has been developed.

EQUALITY, DIVERSITY AND VARIATION
The team came from multiple ethnic groups, working in primary and secondary diabetes care, paediatric and adult services. This helped to ensure that all aspects of diabetes care would be covered equally. Many members of the MDT either lived with diabetes or had children with diabetes. Communications met Language Matters guidance. Using Twitter gave free and accessible support to users in the UK and beyond. Users could choose text size, colour schemes, plus a voice reading interface. The translate function meant that tweets could be understood by users anywhere. The diabetes101.co.uk website brought wider reach. Infographics in multiple colour schemes improved readability for individuals with visual difficulties. They were translated into many different languages. The #RunDMC25k exercise club covered guidance for managing exercise and insulin, and signposted to exercise resources for all physical capabilities. The MDT, who had a range of physical challenges, also did the exercise challenges. The Diabetes101 team recruited NHS HCPs from different ethnic backgrounds to record messages on the importance of getting vaccinated for its YouTube site, publicised via the Twitter account. Seventeen videos were created in many languages, garnering over 23,000 impressions on YouTube.

INNOVATION
The Diabetes 101 project was set up to enable mass support during the COVID-19 pandemic for people living with diabetes (PLWD) via Twitter. This is believed to be the first example of an online healthcare response to a national crisis via social media. Team members were sourced from around the UK, bringing significant expertise and technological skills from a range of disciplines. The 19 staff members worked voluntarily in their own time. Disciplines included medicine, nursing, general practice, pharmacy, dietetics, eye care, psychology and paediatrics. During the COVID-19 outbreak and beyond, PLWD were very anxious, misinformation in the public sphere was a problem, and capacity in specialist diabetes teams was overwhelmed. Many people were turning to the internet for guidance. A fast and responsive platform to provide reliable guidance from diabetes HCPs was needed. Twitter was chosen as it allowed fast information sharing and was familiar to the team. Each project phase had distinct goals to match the predominant concerns of PLWD. Phase 1: provide clear information and contain anxiety in ‘preparation’ phase of COVID-19 and lockdowns; phase 2: provide a sense of stability and entertainment in ‘active’ phase of COVID-19 and lockdowns; phase 3: provide support and education in ‘ongoing’ phase of COVID-19 and lockdowns. Phase 1 provided a constant daily presence with availability for questions, co-coordinated shared activities, and built a strong online community. Essential information was shared and daily rituals introduced to build a sense of routine and shared experience. Phases 2 and 3 brought novel ways of sharing information and delivering education via infographics and ‘tweetorials’. A tweetorial is a brief educational presentation with audience questions. More than 20 tweetorials were delivered, covering topics from eye health to urine albumin to creatinine ratio (ACR) testing. Infographics provided accessible information on psychological techniques, eye health, hypos and data interpretation, to allow PLWD and healthcare teams to understand specific risk data. There were five educational quiz sessions, an activity campaign including a virtual exercise club, an online conference via YouTube, Zoom calls with the audience, plus a website was established.
RESPECTS

The Twitter account has more than 6,000 followers, 35,572 ‘likes’ and 9.7 million impressions. The account is a mainstay of the diabetes online community and is routinely tagged when Twitter users have questions about diabetes. The account is cited in publications for PLWD as a reliable source of diabetes information.

The 22 education sessions have had more than 1.8 million Twitter impressions. This was particularly important as many of the topics are not delivered routinely in general diabetes care (e.g. dental care, sexual dysfunction, specialist psychological techniques).

The account’s YouTube videos have been viewed more than 6,000 times, and the website has received over 6,000 visitors, with 16% downloading educational presentations. An online evaluation survey, launched in May 2020, received 459 responses, primarily from PLWD. The majority found the education sessions either quite useful (36%) or very useful (39%). There have been no costs associated with this project as it was run voluntarily. Funding may be needed in the longer term to support the curators’ time.

DISSEMINATION AND SUSTAINABILITY

A centralised NHSE communication sent links to the account and account resources to the whole of primary care in England, and team members wrote guest blogs for NHSE. Infographics were shared across UK diabetes services, primary care and third sector networks. They were also shared around the world, including to Australia, where the infographic ‘Managing Worry and Diabetes’ was translated into 26 languages and made into a national TV campaign. The project was presented at high profile conferences, it has been featured in the BMJ, Diabetes Update, Nursing Times, Desang and the Diabetes Times, and was shortlisted in the 2020 Nursing Times awards. The website (www.diabetes101.co.uk) was launched in January 2021 to host the tweetorials, videos, infographics and account information. Members of the team have consulted with HCPs from other disciplines who are interested in setting up equivalent accounts.

USER FEEDBACK

Feedback and account traffic data were collected continually via the Twitter account. This allowed the team to make improvements and identify which features were popular. ‘Meet the team’ Zoom meetings provided user feedback and development ideas. In the online survey 92% indicated that they would recommend the account to others.

JUDGES’ COMMENTS:

“This was amazing work from Diabetes 101. They used social media in an innovative way and the infographics on data was amazing. The app gave those who were locked in the opportunity to access detailed information and get answers. The team did this outside of their day-to-day work and it is innovative, engaging and empowering. It is a fantastic example of cross-team working and genuinely kept people out of hospital. The fact that it was delivered in a less formal, chatty way made it engaging, nimble and with great reach.”
SUMMARY
The COVID-19 pandemic meant many diabetes staff were redeployed to support general inpatient care. Information from London and Italy suggested people with diabetes and COVID-19 infection had poorer outcomes, and that the infection might trigger new onset diabetes. In response, the National Diabetes Inpatient COVID-19 Response Group was convened in the last week of March 2020. Its purpose was to maintain consistent support for people with diabetes and provide COVID-specific guidance for specialists and non-specialists. Specialists in diabetes, pharmacy and psychology, from all four UK nations, met weekly, or more often, to create a series of pragmatic guidance documents.

INNOVATION
At the beginning of the pandemic many diabetes specialists were redeployed, contributing to increased variation of care. Clinicians from across the UK came together to pool their specialist knowledge and produce guidelines to offer a consistent approach to improve outcomes. Each guideline was put together in weeks, with the collaborative meeting regularly in the evenings. At the time there was no other specific COVID-19 diabetes guidance/advice available. Seven sets of documents were produced. These included: 1. Documents to maintain and support diabetes teams. These three documents described the vital role diabetes teams played in the crisis and advised which essential diabetes services should remain during the pandemic. The Speciality Template demonstrated how to redeploy a reduced diabetes team and, combined with the SBAR (Situation, Background, Assessment and Recommendations) went to all Directors of services in Trusts/Health boards in the second wave. In many Trusts this led to more effective deployment of diabetes teams. 2. Front door guidance. Early in the pandemic it was apparent that COVID-19 in people with or without previous diabetes increased the risk of severe hyperglycaemia, DKA and HHS. The guidance alerted admitting units to this risk, to check glucose in all admissions and ketones if hyperglycaemic. It provided advice on emergency diabetes management, which medications to stop, and general advice. 3. Guidance for managing inpatient hyperglycaemia. In view of the severe insulin resistance encountered, reports that moderate hyperglycaemia was associated with worse outcome, and limited availability of IV insulin pumps, this guideline provided a modified high dose basal-bolus regime.

It intervened at a BG>12 mmol/l, lower than usual. It was used successfully across the UK. 4. Dexamethasone/glucocorticosteroid therapy in COVID-19 patients. The news that treatment with high-dose glucocorticoids improved outcomes in people with COVID-19 infection, though welcomed, raised concerns around effective glucose management. These medications affect glucose metabolism directly, which, combined with COVID-19-associated insulin resistance and impaired beta cell function, impacts people with and without diabetes. The guidance used a similar basal-bolus regimen to that in the hyperglycaemia guideline, but employed even higher insulin doses. Emphasis was also given to rapid dose de-escalation on stopping steroids to prevent hypoglycaemia and close follow-up on discharge. This guidance is in widespread use across the UK. 5.Hyperglycaemia/diabetes guidance for virtual wards. This was produced to support the safe management of hyperglycaemia in those receiving glucocorticoid treatment for COVID-19 infection outside of a hospital environment. It was simplified, given the less intensive support that might be available in these environments. The final two guidelines were: 6.Guideline for managing DKA using subcutaneous insulin and 7. Safe and supported discharge to reduce readmissions and improve patient flow.

EQUALITY, DIVERSITY AND VARIATION
During the height of the COVID-19 pandemic it was estimated that more than 30% of people in hospital had diabetes or steroid-induced hyperglycaemia. Clinicians who were not diabetes specialists were often caring for people with diabetes, resulting in inequity of care for some. The guidelines helped reduce variation in care by offering advice during a time of unprecedented uncertainty. For people with diabetes, it was hoped the recommended service configurations would offer reassurance that they would still receive good and consistent care. An information leaflet for people with diabetes was also produced to inform, support and empower people with diabetes on their hospital discharge. The National Diabetes COVID-19 group had representation from all four nations, with specialists including diabetologists, diabetes specialist nurses, pharmacists and psychologists. The perspective of people with diabetes came from Diabetes UK, and the guidelines were also approved by its Council for Health Care Professionals. The guidelines were designed for people with pre-existing diabetes but also considered those with new onset diabetes triggered by COVID-19 infection and those with steroid induced hyperglycaemia. The guidelines are available free to all Trusts in the UK and facilities abroad. The guidelines are also hosted on Diabetes UK and ABCD websites.

www.qualityincare.org/awards/diabetes
RESULTS
The objective was to produce brief, essential guidance which could be easily implemented in any Trust. The success is reflected in very positive feedback, both formally and informally, publications of the documents and invitations to present the work at many conferences/webinars nationally and globally. Downloads from the ABCD and Diabetes UK websites totalled 30,000.

USER FEEDBACK
An ABCD survey received responses from 188 consultant members, published in BJD journal. Answers to the question ‘Have you found the ABCD COVID-19 web pages useful?’ were: Yes 130; No 3; I’ve not looked 55. User feedback included this testimonial from Hannah Beba, County Durham and Darlington NHS Foundation Trust: “I cannot say enough good things about these guidelines. These guidelines kept our diabetes patients safe during what was an incredibly uncertain time. There use transcended diabetes teams being used by all specialities and by the full multidisciplinary team. From a personal point of view it was fantastic to get the pharmacists educated quickly on these guidelines and for them to have a workable document to use and signpost to.”

JUDGES’ COMMENTS:

“The initiative from The National Diabetes COVID-19 Response Group provoked an emotional response from the judges and they felt very proud that this work had taken place within the diabetes community. This was an outstanding initiative directly supporting front-line healthcare professionals during an incredibly challenging time for services. The documents generated will have been (and still are) used in every hospital site in the country. Amazing work, fabulous team.”

DISSEMINATION AND SUSTAINABILITY
All guideline documents are downloadable from the ABCD and DiabetesUK websites. There have been four publications in Diabetic Medicine and guidance on remodelling of diabetes services has been included in a publication in the European Journal of Endocrinology. There have been national and international presentations. Members are looking to standardise further national pathways for emergency care and discharge.
DIABETES COLLABORATIVE PROJECT OF THE YEAR
A collaborative approach to insulin delegation: a pilot to drive system change on the background of the COVID-19 pandemic
by East Sussex Healthcare NHS Trust

SUMMARY
The rising number of older, frail, and co-morbid people with diabetes requiring insulin therapy via community services put additional pressure on overstretched community nursing workloads, especially during the COVID-19 pandemic. Therefore, appropriately trained and competency assessed health support workers and healthcare assistants were identified to administer insulin to people with stable diabetes control. Joint working, led by East Sussex Healthcare NHS Trust with Sussex Community NHS foundation Trust, prior to the launch of the NHSE and NHSI framework, resulted in a draft guideline to enable these workers in residential/care homes to administer insulin using pens to adults with diabetes.

EQUALITY, DIVERSITY AND VARIATION
The pilot ensured that all the PWD identified received care locally, from health care workers (HCW) who knew them well, and were actively providing other elements of their care. The training and assessments ensured a standardised approach. The pilot demonstrated that access to the interventions, administration of insulin and capillary blood glucose monitoring, were not missed or delayed. Regular access to the community nursing teams, who acted as assessors and mentors, ensured that the care was reviewed regularly, in terms of efficiency and efficacy, and ensured that the management and overall control of the PWDs’ diabetes remained stable. The involvement of the Diabetes Specialist Nursing team and the MOCH team added another layer of governance.

INNOVATION
The pandemic unearthed areas of concern regarding the management of PWD in the community, especially for those requiring regular support from community nursing teams. Numerous factors impacted the administration of insulin and capillary blood glucose monitoring, including delays and unintentional omissions due to increased workload pressures, IT problems, lack of staffing/resources, and traffic. This pilot demonstrated that safe delegation of insulin administration to health and care workers released the capacity of community nurses, reduced unnecessary delays in delivering insulin to people with diabetes (PWD), improved cross-sector working, Medicines Optimisation in Care Homes (MOCH), empowered the care home role, improved the quality of patient care and supported resilience of the community workforce. This was demonstrated through quantitative data and qualitative feedback from staff and service users. Fourteen care homes and one for respite care in East Sussex were included in the pilot. They had PWD under the caseload of the community nursing team, who visited at least daily, and up to four times daily, depending on the insulin regimen, for administration of insulin and blood glucose monitoring. A total of 22 PWD satisfied the criteria, requiring a total of 46 daily visits by the community nursing team to administer insulin. Online training was completed by 90 staff from the care homes prior to face-to-face assessment of competency. They were also given a resource pack for reference. Competency would be checked at least once per resident and, typically, three times for a new carer/resident every two years. Assessment in practice must be by a Registered Nurse with competence at level 4 or above.
RESULTS
The pilot achieved the following benefits: 1. Cost and time saving for community nursing. The community nursing team spent an average 30 minutes per visit on monitoring capillary blood glucose and insulin administration. The 22 PWD in the pilot received this care from the HCWs in their respective homes. For 46 visits a day, of 30 minutes each, this equates to 8,395 hours a year. Using another 30 minutes a year of visits saved from the community nursing caseload that could be diverted to look after more vulnerable people in the community. The Agenda for Change Band 5 mid-point is £27,239 pa. The gross hourly income before tax is £13.93. Calculating the cost of the visits (5,425 hours) a year using the hourly rate of a mid-point Band 5 RGN equals £75,570. Incorporating the time spent in providing training and assessment of the HCWs still results in significant cost-positive implication. Furthermore, this does not include the mileage costs. 2. Cross-sector working. The pilot was designed in close collaboration with the community nursing teams, health and social representative, diabetes specialist team and MOCH. This ensured multi-sectoral discussion and agreement on improvements. 3. Benefit to residents and patient-focused care. Numerous incident reports had identified delays in the delivery of insulin, with contributing factors including task allocation, heavy caseloads and traffic. Trained and assessed HCWs provided this care without such delays. The HCWs also had closer professional relationships with PWD. Their presence in the care environment where the intervention took place also reduced, if not avoided, issues relating to the incidence of acute diabetes complications.

USER FEEDBACK
Community nurses, care home managers, residents and next of kin all reported positive experiences from the pilot.

DISSEMINATION AND SUSTAINABILITY
The pilot significantly reduced the number of visits from the District Nursing caseload. It enhanced cross-sector working, reduced delays in the timing of insulin administration and improved access for patients, especially against the background of the COVID-19 pandemic. It will continue after the pandemic period.

A full guideline has been developed for local use and adheres to NHSE best practices. The success of the local pilot brought support from key stakeholders and reassurance in terms of risk management. This enabled the team to take up the NHSE voluntary framework and obtain governance and accountability sign-off through the local Trust. Close working with key stakeholders from the outset helped overcome challenges that others had struggled with, mainly around governance processes. This prevented several neighbouring areas from starting this work. It was vital to engage the Head of Community Nursing employed by East Sussex Healthcare, the organisation which supplies community nurses. This work is being considered at Sussex level. The framework is easily transferrable to other service

JUDGES’ COMMENTS:

“East Sussex Healthcare NHS Trust’s entry demonstrated a good use of available staff and the judges liked the way the framework had been put together. The legal document that protected healthcare workers was very strong, as was the training provided. We felt that others would be able to learn from this project and liked the that the whole planning, protocol and training was in place before any national guidance came out. A unique entry.”
TYPE 1 SPECIALIST SERVICE

DigiBete App
by DigiBete and Leeds Children’s Hospital Diabetes Team

SUMMARY
DigiBete is a multi-award-winning digital web platform and app for the T1 diabetes community, co-designed by patients, parents and the Leeds Children’s Hospital Paediatric Diabetes Team. The DigiBete.org web platform, and the subsequent nationwide app launch in 2020, provide free access to clinically-approved education and training resources to support young patients with T1 diabetes, their families and communities. It has enabled rapid, direct digital communication between registered patients and individual teams during the pandemic. The app launched regionally in October 2019, and nationally in June 2020, in response to COVID-19, with funding from NHS England.

EQUALITY, DIVERSITY AND VARIATION
DigiBete.org is available, without cost or registration, to all. The app is free to all CYP attending a children’s diabetes clinic in England and Wales. Standardising care and reducing inequalities in diabetes services is at the core of DigiBete’s work. DigiBete resources comply with Web Content Accessibility Guidelines (WCAG) and employ Text Help and the ReachDeck Toolbar, to support web visitors in a way that suits their needs. Features include text-to-speech, reading with choice of text size and translation facilities to support up to 99 languages using Browsealoud technology. All resources are routinely subtitled. DigiBete has addressed inequality through World Diabetes Day videos and developed resources to address minority communities. An Equality and Health Inequality Impact Assessment (E&HIIA) document monitors and reviews representation from minority groups. A variety of ages, backgrounds and ethnicities are represented in the videos on the site/app. A parallel site for young people with T2 diabetes is planned.

INNOVATION
The DigiBete website is established in paediatric practice as a clinically approved resource for patients, families, carers and NHS staff managing T1 diabetes. The DigiBete app launched in Yorkshire in October 2019 to provide personal access to age-appropriate self management education, help after diagnosis and for clinics to enhance communication and reduce paper use. In March 2020, when COVID-19 hit, the DigiBete app was funded by NHSE and launched nationwide in June 2020. Although children and young people (CYP) are less affected by COVID-19, effective diabetes management is paramount to prevent hospital admissions, avoid DKA episodes and maintain good health remotely without face-to-face appointments. Much of the app microlearning educational content is consistent across all services; each diabetes service can tailor messaging to an individual cohort. All content and functionality meets NHS standards.
The entry from DigiBete and Leeds Children’s Hospital Diabetes Team was strong and a welcome development. The fact that it was free in Wales to young people and adults made it stand out and patients clearly benefit from it and like using it. It gives wider access to an app than other online systems and is very responsive and cost effective. The fact that they have worked on inclusion and sustainability is clearly demonstrated. The simple language and bite size information make it accessible and easy to use.
TYPE 1 SPECIALIST SERVICE

Transforming the CHFT Children’s Diabetes Team
by Calderdale and Huddersfield NHS Foundation Trust

SUMMARY
In order to continue supporting and educating its children and young people during the pandemic, the CHFT paediatric diabetes team analysed every process for patients and considered how to deliver it virtually. Every method of communication was used, including social media and DigiBete, to provide patients with up-to-date advice, support and guidance. Virtual clinics were set up using Microsoft Teams to ensure patients could be seen safely. Despite 50% of the nursing workforce being redeployed internally, the transition to virtual diabetes management was successful.

EQUALITY, DIVERSITY AND VARIATION
During the pandemic, it was important that families could download at home via Diasend (and other packages) to keep communication going, enabling safe interventions and accurate clinical advice. However, without proactive interventions, some families would not have been able to access this option, leading to poor outcomes and, in some circumstances, a serious safeguarding issue. Pre-COVID-19, downloading in clinic had always been done for them on arrival, prior to their consultation. Between clinic appointments there had also been the safety net of school visiting to download meters in the community, or in the homes of the most vulnerable patients. A number of CYP live in socially deprived areas, in low income families, some with English as a second language. Not all families had access to a laptop some would find it challenging to install the software and order equipment from the meter suppliers. Schools were asked to support vulnerable families by providing loan laptops and installing the appropriate software drivers on to their school laptops, so low income families could download at home. Medical Welfare Staff in schools were given access to the cloud-based downloading packages, so they could upload the data for the team, while the child was in school. Five senior schools did this, with information provided to their IT departments and working via email and MS Teams to train the school staff. Schools were asked to provide loan home learning laptops so the patients’ families could be helped to do this themselves at home. In cases where English was a second language, the team called the pump/meter supplier to have dongles posted direct to the patient. Replacement cables were ordered for those patients who had “lost” the original ones, to ensure all patients had equal access.

INNOVATION
Viewing glucose data is an essential aspect of the Paediatric Diabetes Specialist Nurse (PDSN) role, identifying patterns and variability in glucose levels, enabling insulin adjustments and improved glycaemic control. This had been done at a clinic appointment using the children and young people’s (CYP) glucose meter and downloading the data onto the diabetes management platform Diasend. For optimum overview of glucose data, weekly downloads were recommended. During the consultation the PDSN/family would review and discuss the downloaded data together, empowering the CYP/family to become part of their diabetes care. Preparing for the virtual clinic and pursuing CYP for their glucose data were time-consuming, but more CYP downloading data greatly improved their diabetes management. Every CYP was called to make sure they and the family knew their sick day advice and when to call for assistance. Being ill can affect diabetes management and it is imperative to provide clear guidance. In addition, they were asked to know their total daily dose; the amount of long-acting insulin plus meal time insulin, and advised extra insulin if ketones were present.
RESULTS
A lower DNA rate for clinics resulted in a more cost effective service. Virtual working brought cost savings, with staff seeing more patients with less travel and time restraints. Follow-ups were more frequent, resulting in a fall in rate of admissions to the children’s ward. As the lockdown eased, annual review clinics were separated to ensure that the seven key health checks for CYP with diabetes were being met. Around 20-25% of patients were home downloading pre-pandemic, but 80-85% are home downloading now. In 2019-2020 the percentage for sick day rules was 51%, but during the pandemic, this reached 99%. In the Nursing Times awards the initiative was a finalist in the children’s service category.

USER FEEDBACK
User feedback was gathered from Facebook, Twitter, parent mail, DigiBete, surveys and discussion groups. Suggestions for improvements were requested via social media. Patients indicated they wanted their long range results so social media was consulted on how this should look. A ‘drive-thru’ HbA1c service was set up, where patients were given a five-minute window for a point-of-care HbA1c check. Nearly half the CHFT paediatric diabetes team caseload was seen in one day. A quality improvement programme was established for the transition service at CHFT. Current and previous transition patients were invited to make suggestions. Social media was used to engage with families, spreading messages of positivity and hope.

DISSEMINATION AND SUSTAINABILITY
In order to access CYP blood glucose readings, all CYP/families were called and helped to download their data at home via the sharing platform Diasend. The calls were made by the Diabetes Specialist Nurse (DSN), patient advocate or dietician. The CYP/family were given a telephone number to request a Real Tyme download cable. The team member explained that the cable would enable the CYP to share their blood glucose data, enabling the DSN to review blood glucose readings and make relevant changes. In order to optimise CYP glycaemic control it is essential to monitor their HbA1c level. This would normally have been done at a face-to-face clinic appointment. To overcome this issue the team developed the HbA1c drive-thru initiative, using the Standard Operating Procedure (SOP). Using SOP meant that other teams had a clear process to follow should they wish to replicate it. Information about the drive-thru was sent out to CYP/families via parent mail and the Facebook page, informing them of the time, date, place and contact number to make an appointment. Giving families new and sustainable ways to share and review blood glucose data and obtain a HbA1c result empowered them to optimise their diabetes management.

JUDGES’ COMMENTS:

“This entry from Calderdale and Huddersfield NHS Foundation Trust had excellent examples of how paediatric teams responded to the pandemic. It was impressive that the team had personally got in touch with every single contact and maintained equality and diversity for those who didn’t have the use of technology, working with them on access. It was impressive and innovative how they used school technology services, identifying families who needed digital support.”
SUMMARY
With face-to-face patient diabetes education on hold during the COVID-19 pandemic, the Diabetes Education and Self Management for Ongoing and Newly Diagnosed (DESMOND) team at Leicester Diabetes Centre took various actions. New materials were added to MyDESMOND relating to COVID-19 and diabetes, resilience and emotional wellbeing, ensuring fair access for all. Virtual Delivery Packages were set up for all DESMOND modules. Guidance for educators was written and made available to all DESMOND teams. The DESMOND Academy was launched with virtual workshop support for existing educators, new educator training was redesigned, and Quality Assurance assessment methods were refined for virtual delivery.

EQUALITY, DIVERSITY AND VARIATION
The programmes were adapted to ensure little or no variation from the original DESMOND programme. Each online module was reviewed and revised in collaboration with the Centre for Ethnic Health Research. Key pieces of information were translated into other languages and cultural appropriateness was widened through the introduction of more food and drink images. Users could complete the educational materials in their own time. Virtual groups could be delivered in 2 x 3 hour or 3 x 2 hour sessions, as opposed to the 6-hour day for face-to-face groups. MyDESMOND has been shown to positively impact diabetes distress and self-management. LDC staff have delivered groups to patients for provider organisations after governance clearance, in English and other languages. Slide sets and resources for virtual delivery have been translated and culturally adapted. DESMOND modules are now available: as an online programme through MyDESMOND; virtually delivered (over video conferencing software), and in person, where local and national policy allows. The person-centred approach is core to DESMOND’s philosophy.

INNOVATION
Alternative means of empowering patients with, or at risk of, type 2 diabetes (T2D) to self-manage had to be sought when in-person education was not possible. As those with T2D and those from ethnic minority backgrounds were at increased risk of adverse outcomes from COVID-19, they needed support. The focus was on increasing the number of providers able to offer MyDESMOND to patients. Modifications were needed so that groups could be delivered virtually. Written guidance for educators was insufficient, so the DESMOND Academy was launched. Additionally, there was a need to continue to train new educators while maintaining quality assurance. The LDC multidisciplinary team examined themes from its patient forums to guide content for the MyDESMOND digital programme. Cultural adaption of MyDESMOND was also carried out. Feedback from patients was used to make refinements. Electronic resources and guidance to support educator delivery and patient learning had to meet the criteria for structured self-management programmes. The 1,000+ educators on the database, from 105 healthcare organisations across the UK and Ireland, local staff and patients, provided feedback in May 2020 via online surveys and virtual group meetings. After revisions, version two was rolled out in August 2020. Ensuring quality assurance processes were fit for virtual observations was important, being unique to DESMOND.
RESULTS

A ten-fold increase in users on the MyDESMOND platform has been recorded since March 2020. These patients were referred, registered and began using one of the online modules. At the first lockdown there were 21 providers offering MyDESMOND; there are now 90, including nationwide roll-out across Wales.

An online survey in June, sent to all MyDESMOND users, received 2,579 responses. Findings showed: 85% found the programme easy to navigate; 92% said the information was presented clearly and concisely; 82% stated they would recommend it to others; 82% felt they understood their diabetes and how to manage it better, with 61% reporting being more active and 73% changing their diet as a result. Review of self-reported user data showed weight reduction for 87% of users and HbA1c reduction for 85% of users.

MyDESMOND has had significant impact on reducing diabetes distress and improving self-efficacy.

For virtual group delivery, patient online surveys (began August 2020) show an average rating of 4.7 out of 5 for overall experience, with 94% reporting plans to make lifestyle changes as a result. Despite not meeting in person, 92% said they felt part of a group. Since July 2020, 502 existing and 61 new educators have been trained to deliver virtual groups to patients. Of these, 84% said they felt more confident to deliver virtually as a result of attending, and 95% rated the workshops as useful/very useful.

DISSEMINATION AND SUSTAINABILITY

MyDESMOND and its three main modules (Type 2 management, Let’s Prevent Diabetes and Babysteps) can be implemented quickly, with little administrative time required to add and track patients, once the relevant governance documents are in place. Uptake rates and user journeys within each module, plus feedback, will be used to develop MyDESMOND. Virtual patient group delivery was provided within two months of the beginning of the pandemic to 105 healthcare organisations across the UK and Ireland, and over 1,000 existing Educators. These virtual groups helped ensure waiting lists were kept down and commissioning KPIs were met. Virtual delivery will remain alongside face-to-face groups and digital platforms like MyDESMOND, as shown in commissioning requirements. More hybrid styles of delivery will be investigated. Discussions are underway with the DESMOND team in Australia regarding virtual delivery, both as a result of the pandemic, but also because of that country’s wide geographical spread. Virtual delivery could enable national/international provision that crosses existing healthcare geographical boundaries. LDC has been commissioned by a large Integrated Care Service from the North East to provide virtual groups to their ethnic minority populations. New educators are being trained and ongoing support is being provided virtually.

USER FEEDBACK

For development of new content for MyDESMOND user reference groups were formed to assess the materials. In August 2020 and June 2021 an online user feedback survey was carried out with all existing MyDESMOND users, garnering over 3,300 responses. All qualitative feedback was analysed to identify barriers/challenges for future developments to content and functionality. The online patient forums were monitored to ensure current needs were met. Educators shared experiences via DESMOND Academy workshops that shaped developments.

JUDGES’ COMMENTS:

“This highly professional team have submitted a well-crafted and impressive entry. It was clear they helped other services that were in trouble during the pandemic, giving a good example of scalability. The team listened to concerns around access and were responsive to feedback on their virtual and flexible platform. The judges were also impressed with how culturally aware the programmes were, developing them in different languages. They went beyond just translating the programme from face-to-fact to virtual. Outstanding!”
Providing structured education programmes virtually during COVID-19 pandemic by York and Scarborough Teaching Hospitals NHS Foundation Trust

**SUMMARY**

Good2Go is a structured education course for people with Type 2 diabetes. It has been running in person since 2010. The aspiration was to offer Good2Go in different formats, to make it more accessible, as working age participants represented a large proportion of non-attendees. The pandemic pushed the move to a virtual platform. However, the goal was to offer a portfolio of structured education options for different needs and preferences. Two solutions are now provided: a virtual webinar, delivered daytime or evening, or a workbook with one-to-one Q&A for those without internet access. Video clips are also available.

**INNOVATION**

Good2Go was traditionally a six-hour, face-to-face course with visual props and different teaching styles. Slides were adapted and more animations used to maintain the flow of sessions and participant engagement. Upskilling in the technological aspects of delivering an online course was needed. The Trust had to approve the hosting platform for the presentations, upskill staff in using this software and also ensure participants felt comfortable and competent. A dietetic assistant supported participants who were not confident with technology. A workbook of course content was created for those without access to technology or who preferred not to use it. It was activity based to encourage participant involvement, with a three-week follow up phone call with either a diabetes nurse or dietitian, to field questions and check understanding. The workbook was so popular it was printed professionally and distributed at the workshop. Video clips are also available.

**RESULTS**

Demographic data and HbA1c and cholesterol pre- and post-course were collected. Comparison was made between different course formats (webinar versus workbook) using the data from July-November 2020 and compared with data from July 2019-November 2019 when it was delivered face to face. In addition, workbook data were split into participants who accepted the three-week follow up phone call and those who did not answer the phone or who reported that they did not complete the workbook. Those seen face to face July-November 2019: 138 participants; those seen via webinar: 51 participants; those who received a workbook: 144 participants.

Figures for July-November 2020: 195 participants. For the face-to-face course, pre-course HbA1c average was 62.2mmol/mol, and six months post course, HbA1c was 55.1mmol/mol. Pre-course cholesterol averaged 4.8mmol/L, and six months post course 4.4mmol/L. For the webinar, the pre-course HbA1c average was 62.4mmol/mol, and six months post course, HbA1c was 54.4mmol/mol. Pre-course cholesterol average was 4.5mmol/L, and six months post course 4.3mmol/L. For those who did the workbook (119 who responded to follow-up call), pre-course HbA1c average was 57.8mmol/mol, and six months post course HbA1c was 55.0mmol/mol. Pre-course cholesterol average was 4.5mmol/L, and six months post course 4.4mmol/L. Results for the workbook from those who did not respond to the follow up call (29 participants) were: pre-course HbA1c average 58.2mmol/mol, and six months post course HbA1c was 58.7mmol/mol. Pre-course cholesterol averaged 4.8mmol/L, and six months post course, 4.9mmol/L. The webinar and face-to-face course had similar results. The workbook did not see such a decrease in HbA1c or cholesterol, but those who engaged with it and said they filled it in did better in outcomes than those who did not. The average age for webinars was 59.5 years, compared to 61.3 years for the workbook. The adaptation of Good2Go meant people could still receive timely advice about their diagnosis, despite constraints. There were also cost savings.

**EQUALITY, DIVERSITY AND VARIATION**

Offering a range of interventions meets almost everyone’s needs. Information is provided face to face where group sessions are not appropriate, for example if an interpreter is required or for participants with learning difficulties. All referrals are triaged by the Education Administrator to discuss the different Good2Go options. A Band 3 dietetic support worker helps with technological issues that may have caused reluctance to join. This has proved successful.

**WINNER**

Hospitals NHS Foundation Trust

by York and Scarborough Teaching Hospitals NHS Foundation Trust

www.qualityincare.org/awards/diabetes
The York and Scarborough team’s entry was a comprehensive and thoughtful review of how to deliver education and meet varying patient needs. The dietician support used was really beneficial and the judges also liked that sessions were offered outside of normal hours, which demonstrated good flexibility. The project also acknowledged that some people may struggle with technology and offered alternative access for these individuals. The entry has distinct scope for dissemination, is clearly sustainable and beautifully presented.

USER FEEDBACK
The return rate for the post-course emailed evaluation form was poor so something like SurveyMonkey could be used for feedback before participants finish the course. To date, feedback has been overwhelmingly positive. Participant feedback has always been the main driver for course and session updates. The NHS Trust is consulting on the format for real-time evaluation forms.

DISSEMINATION AND SUSTAINABILITY
The project has been delivered in York Hospital for the Vale of York CCG population. Prior to the pandemic the resources were shared with other CCGs and the team was approached about selling the package. There is a ‘train the trainer’ package for all the QISMET-accredited programmes and the lesson plans for Good2Go have been adapted to support delivery of the webinars, so it could be easily shared with interested Trusts. QISMET has provided full support, in terms of accreditation and quality assurance, since 2012, so this course is sustainable. This is developed and improved continually to ensure the best and latest information is provided. Participants receive the information that they need soon after diagnosis in a way that suits them.

JUDGES’ COMMENTS:

“The York and Scarborough team’s entry was a comprehensive and thoughtful review of how to deliver education and meet varying patient needs. The dietician support used was really beneficial and the judges also liked that sessions were offered outside of normal hours, which demonstrated good flexibility. The project also acknowledged that some people may struggle with technology and offered alternative access for these individuals. The entry has distinct scope for dissemination, is clearly sustainable and beautifully presented.”
DIABETES EDUCATION PROGRAMMES – PEOPLE WITH DIABETES

Gloucestershire community diabetes education team
by Gloucestershire Health and Care NHS Foundation Trust

SUMMARY

The Diabetes Education Service was suspended in March 2020 to support the COVID-19 response, so the team proactively created a new online programme, using MS Teams, to provide diabetes education. The six-part, online course runs across multiple days/times of the week, including morning, afternoon and evening, to ensure flexibility for users. It covers diabetes management, the importance of looking after mental health and wellbeing, understanding goal setting to encourage motivation in challenging times and the importance of staying physically active during lockdown. The information provided accounts for psychological, physical and learning difficulties, cultural differences and other long-term health conditions.

EQUALITY, DIVERSITY AND VARIATION

The goal of the programme was to create a safe online environment and positive educational experience for service users, regardless of sex, age, ethnicity, religion, disability or socioeconomic status. The diabetes team took part in a behavioural insights study conducted by ICE Creates, designed to explore the motives, barriers and enablers to increasing access to the service among minority groups. Qualitative insight was conducted with the final sample, including people from deprived areas of Gloucestershire, and a mix of age groups, ethnicities and religions. From this research project, strategic recommendations were made to increase uptake of the education programme. The online programme led to a reduction in a number of health inequalities and patients and stakeholders supported its continuation. Individuals were reached who would not otherwise have been able to attend groups in person (due to transport issues, shielding, working commitments or childcare). Success was assured by offering morning, afternoon and evening groups, a faster administrative process and more ‘higher-demand’ sessions.

INNOVATION

The Diabetes team identified a need for continued specialist support during COVID-19, as reduced contact with healthcare professionals was likely to increase anxiety, isolation and confusion for those managing diabetes. A lot of misinformation was being shared via social media, online communities/forums and non-accredited websites, advocating for low-intake diets, unsuitable lifestyles changes and alternatives to medication. The immediate challenge was sourcing a method of contact which could meet the needs of multiple service users at a time, whilst being efficient and accessible to a wide and diverse audience. The answer was safe and secure online group support via MS Teams. An online course was created, guided by a Microsoft presentation that covered all necessary bases for someone managing diabetes. It also allowed questions, comments or concerns about health to be addressed with positivity and accuracy by a specialist. All content was created to be widely shared with those who successfully completed the course, to continue to support their learning beyond the online programme. Resources included a 36-page patient booklet, PDF copy of the presentation, easy-read materials for users with learning difficulties, and signposting materials for additional services. Social media was used to continue engaging with individuals and share relevant, up-to-date and accurate information.
RESULTS

Since the programme started in October 2020, the diabetes education team has received 738 new referrals. A total of 437 (59%) users have completed the online course, 46 service users declined the offer (6%) and 255 were recorded as ‘did not attend’ (DNA) (35%). A ‘how-to’ guide about how to log in to the platform and use its basic functions was developed to help with technical reasons for non-attendance. SMS reminders were also sent 24-48 hours before session booking, reducing DNA rates. Service users were asked to provide at least 24 hours’ notice if unable to attend. Comparing the costs of face-to-face structured education (including transport, room hire, diabetes educator pay) with the online training, the total saving with the online education was £418.26 per week.

DISSEMINATION AND SUSTAINABILITY

This was a county-wide community project targeting anyone managing type 2 diabetes, or those caring for or supporting someone with the condition. Creating an online programme has overcome multiple barriers experienced by harder-to-reach cohorts, such as individuals with working commitments, childcare/carer responsibilities, or mental health issues. By reducing the need to take time away from work, reducing travel requirements to attend sessions and supporting those struggling with anxiety or stress, the online sessions have been a huge step in the right direction, not just for diabetes support, but for healthcare interventions overall. Reducing business and personal costs of attending in-person group sessions means an online course is less inconvenient and more likely to be welcomed. This project will continue post pandemic as it has proved invaluable to maintain supportive relationships with service users. Offering a choice of face-to-face sessions or online courses will achieve the greatest engagement. The training will be migrating onto a Moodle platform to host future courses and offer more e-learning materials. This initiative could be replicated by other services.

USER FEEDBACK

The NHS Friends and Family Test (FFT) is used to collect feedback. It collects demographic and experiential information. The monthly report is reviewed by the Diabetes Team. The service has been rated 95% ‘Very good’ or ‘Good’ every month, but comments left by service users provide invaluable insight and inform the need for any suitable changes or modifications to the programme based on the patient experience and requirements. There has been much interest and support from stakeholders and colleagues within and outside the Trust. Medical professionals have asked to view the training to better understand what is being offered to patients with diabetes in Gloucestershire. Interested stakeholders and HCPs have offered positive feedback, including colleagues from NHS Cornwall.

JUDGES’ COMMENTS:

“This strong entry from Gloucestershire Health and Care NHS Foundation Trust achieved a lot from a low starting point, in a challenging environment. The judges were very impressed with the inclusion of feedback from stakeholders in how they developed the project and it was very inclusive. A good example of innovation beyond just moving online and making education available to as wide an audience as possible. It has clear plans for sustainability and has already begun wider dissemination. A brilliant job.”
DIABETES EDUCATION PROGRAMMES – PEOPLE WITH DIABETES

Remote education during the pandemic - the roll out of a new bolus calculator app
by Paediatric Diabetes Team, Royal United Hospital Bath NHS Trust

SUMMARY

Three challenges had to be overcome: the pandemic necessitated changes to face-to-face and group education; the Expert meter, popular for accurate bolus calculations, was being phased out; and more Libre users wanted to use a scanned value in a bolus calculator. MyLife was identified as the most suitable bolus calculator app. The diabetes team, patients and families were educated in set-up via new training resources. IT challenges and poverty were overcome to ensure accessibility. Then ward staff were trained, to enable the initiation of MyLife at diagnosis. Learnings and training resources were shared with South West CYP Diabetes Network.

EQUALITY, DIVERSITY AND VARIATION

Families unable to access the training session remotely, either due to lack of a home computer, or other personal challenges limiting access to a remotely-delivered resource, had a face-to-face session, either at the hospital or at their home. Some families were unable to afford the specified mobile phone that the app required. This was particularly the case for young children. Some phones were sourced via a post on the hospital Workplace platform and the Trust Innovation Panel funded additional devices. Where families had reservations about their child having a mobile device, it was explained that it was to be used as a diabetes management device that did not need to be enabled for phone or other applications. This was also explained to schools that had reservations about a child requiring a mobile phone during class time.

INNOVATION

The caseload had to be moved from the Expert meter to an alternative bolus calculator. This was triggered by the phasing out of Expert meter, but was also required so that Libre users could use a scanned value in order to maintain the accuracy of their bolus calculations to achieve optimal glycaemic control. This had to be done in the context of the pandemic, embracing virtual consultation and then virtual education, and replacing group education sessions with one-to-one sessions. Once the MyLife bolus calculator app was chosen, training materials were developed that could be delivered remotely. These included: a step-by-step guide on app set up; a PowerPoint presentation that could be delivered to a family across a virtual platform; and a recorded, narrated presentation of the slides that could be re-watched. Team members offered the remote training to their caseloads individually. The training and set up were delivered to 25 children and young people before re-evaluation. Technical issues were resolved by the app developer. The training was rolled out to ward staff, so that the app could be initiated at diagnosis, and established patients using the app could be safely cared for if admitted to the children’s ward. This was done with short training sessions, delivered on the ward, over a month, with understanding evaluated with a quiz. A video explaining the new initiative and demonstrating the set up was also recorded and shared on Workplace for other staff.

RESULTS

The caseload that needed to transfer to MyLife was 125. Between March 2020 and June 2021, 90 patients (72%) were set up. This included establishing the correct individualised bolus calculator settings, familiarity with using the app, and automatic upload to Diasend, to facilitate remote support by the diabetes team. Caseload review identified patients more resistant to change, often teenagers who had used the Expert meter for longer. Diabetes nurses put additional time into discussing the benefits with these individuals and offered flexibility in timing and delivery of sessions to facilitate their uptake. In addition to successful delivery of the training and high patient acceptance of the new bolus calculator, significant improvements in the unit HbA1c results were noted. Despite the challenges of the pandemic, and the increase in virtual consultation, more than 99% of the caseload had at least one HbA1c performed, so the 20/21 data represented the entire patient cohort. The diabetes unit key data from the 2019/20 NPDA audit period was: Median HbA1c 62.5 mmol/mol; HbA1c HbA1c > 80 = 14.6%. The equivalent figures for the 2020/21 audit data submission were: Median HbA1c - 59.5 mmol/mol; HbA1c HbA1c > 80 = 8.74%. This is as a result of: the acceptability and usability of the bolus calculator app; the increased use of a bolus calculator for patients using a Libre flash glucose monitor, whose use of the Expert meter bolus calculator had already reduced; and the increased visibility of patient data, with automatic upload of data to Diasend that enabled increased support and advice from the diabetes team. The improvement in HbA1c, with beneficial impact on the long-term complication rates, has significant health impacts on an individual level, and health and economic impacts on a population level. There are also cost benefits from switching to a different blood glucose testing meter.
USER FEEDBACK

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DISSEMINATION AND SUSTAINABILITY

The pandemic necessitated the production of education materials in a different format, which increased consistency in the messages and training delivery, reduced stress, and proved an efficient delivery method. Time saved was spent tailoring training delivery to those families with access difficulties. The experience and training materials were shared with other paediatric diabetes units in the South West, through a presentation and Q&A session at a network meeting in March 2021. Other Paediatric Diabetes Networks showed interest. The transition service has raised awareness of the bolus calculator and training materials with the local young adult diabetes service.

JUDGES’ COMMENTS:

“This was a moving entry that showcased an honest and candid account of parent experiences. There were clear and significant attempts at inclusivity, with a good explanation of how the team went about achieving this. The overall approach was impressive, particularly taking into account that some people may not have access to technology. The judges were also impressed with how the team challenged schools’ phone policy.”
DIABETES EDUCATION PROGRAMMES – PEOPLE WITH DIABETES

Cooking in a virtual world: How Cook and Eat adapted during the COVID-19 pandemic
by Royal Devon & Exeter Foundation NHS Trust

SUMMARY

Cook and Eat is an established level 3 carbohydrate education programme for children and young people (CYP) at Exeter Children and Young Person’s Diabetes Service. It changed from an annual face-to-face session (for under-16s) to virtual sessions (offered to all) during COVID-19. The CYP cook a recipe at home with a parent or carer. Each recipe is designed to be easy to follow and uses inexpensive and accessible ingredients. The carbohydrate counting process is explained and the CYP are encouraged to do it independently. The main aim is to create a fun, engaging and collaborative environment for supporting carbohydrate counting.

EQUALITY, DIVERSITY AND VARIATION

Each recipe used inexpensive ingredients and some of the same ingredients were used each time, preventing wastage and additional expenditure. Parents/carers could request a grocery voucher from the facilitator (funded by parent support groups) for purchasing ingredients and equipment. All recipes could be adapted to gluten- or dairy-free diets. Participants could attend sessions with their videos on or off, to reduce anxiety. Additionally, recognising the holistic and systemic impacts of diabetes, siblings were welcome to attend. Diversity and confidence in literacy and numeracy were considered. The sessions included a range of pedagogical learning approaches, including listening, tactile, visual and reading. Recipes were developed to be easy to follow and shared by PowerPoint. A visual representation of the recipe was used in addition to text, to aid those with limited literacy, or with English as an additional language. The facilitator also explained each step of the recipe. Mathematical concepts were refined to suit different abilities. Participants could share answers in different ways or not at all. While sessions were designed for a range of ages, they were more popular with CYP of primary age. No one above Year 11 attended.

INNOVATION

Face-to-face Cook and Eat carbohydrate education sessions had been offered once a year in secondary schools. Virtual sessions using Zoom commenced in October 2020 and took place four times. The sessions involved CYP cooking a recipe at home with a parent or carer then carbohydrate counting the recipe with the facilitator. Sessions aimed to be fun, engaging and collaborative. Secondary aims included continuing relationships with healthcare staff, including siblings and other family members, in carbohydrate counting, and education on other aspects of health and nutrition. CYP were recruited via DigiBete app news, email invitation and posters on parent/carer support group Facebook pages. Sessions lasted 45-60 minutes, and were held during school holidays; session times and days varied to increase attendance. Previously, face-to-face sessions were offered to CYP up to year 11, but all CYP within the service were invited to the virtual sessions. After the initial pilot, Zoom Pro was identified as the most suitable platform. Sessions started with an introduction, ‘show me, tell me’ game and session ground rules. The CYP then worked through the recipe and the carbohydrate estimation process. Then CYP were helped with carbohydrate counting.
RESULTS

Twenty-five CYP attended between October 2020 and April 2021, representing 18.5% of the 135 caseload (under 16 years of age) of ExCYPDS. They attended a total of 54 sessions; 60% attended more than once.

Virtual sessions were attended by those who had previously been to face-to-face Cook and Eat sessions and those who had not. Seventeen of the CYP had attended a face-to-face session before the pandemic. CYP of a wide age range (4-15 years) and of diabetes duration (0 months-10 years and 10 months) consistently attended across all group sessions. A small number of CYP attended one-to-one sessions. Seven CYP attended nine sessions: four girls and four boys, three of whom were primary school age. Fewer families attended online sessions than attended face to face annually. Of the under-16 caseload 46-51 (38-42%) attended previous face-to-face sessions, while 18.5% attended virtual sessions. Potential reasons include technological disadvantages, technology fatigue, changes to family commitments or routines, psychological stress and social disadvantages. Importantly, the sessions allowed continued contact with the healthcare team outside the clinic, let siblings join in and let families see others living with diabetes. The sessions were free to attend. The cost per head for Cook and Eat in person is approximately £500 per year (excluding staff costs). In contrast, Zoom Pro is under £180 per year and more education can be offered (up to six sessions rather than one).

USER FEEDBACK

Participants were asked to feed back on food taste, session acceptability and to share photographs of their culinary creations with the facilitator by email after each session. Some participants shared their feedback via Twitter. Participants enjoyed the sessions, which may help strengthen relationships with healthcare professionals outside of clinic appointments, contributing to improved overall care. In future planning, some families may prefer face-to-face sessions, and the potential additional benefit of peer interactions.

Different professionals observed the sessions and gave feedback, which allowed further refinement. The sessions also provided opportunities to enhance inter-disciplinary working.

DISSEMINATION AND SUSTAINABILITY

The virtual sessions enabled greater remote observation by professionals in other services and the sharing of resources. The pilot sessions were remotely observed by dietitians from UCLH, Gloucester, Swansea, and Taunton. The resources were shared with the South West Dietitians and beyond. Paediatric Diabetes services at Bath, Gloucester, Taunton, Torbay, Swindon and UCLH have also run similar virtual education sessions. An article reflecting on session development and attendance has been submitted to an academic journal. Inter-service collaboration and sharing helps both project sustainability and continued innovation; additionally, it decreases overall costs to the NHS. DigiBete will host the Cook and Eat resources for families and other professionals to have their own sessions in 2021. Face-to-face Cook and Eat sessions had a wider reach than virtual sessions, but virtual sessions and the video platform used means that the virtual sessions were more cost effective. Further feedback from families is paramount when considering longer-term service provision and promoting inclusivity.

JUDGES’ COMMENTS:

“Cooking in a virtual world” is a great initiative that made for a different and enjoyable read. It was an innovative project that was fun and practical, offering mental health and emotional support, which challenged during the COVID-19 isolation. The judges liked that it offered the opportunity for children to connect with each in a social and fun environment. The financial diversity was also excellent.
EQUALITY, DIVERSITY AND HEALTH EQUALITIES - REDUCING VARIATION OF CARE AND OUTCOMES PARTICULARLY AS IT RELATES TO SOCIOECONOMIC, CULTURAL OR RACIAL DETERMINANTS

An evaluation of group educational sessions for people with Type 2 Diabetes on insulin amongst Black, Asian and other ethnic minority communities

by London North West University Healthcare NHS Trust

SUMMARY

The project evaluated group sessions for Black, Asian and other ethnic minority communities with type 2 diabetes (T2D) on insulin at GP practices and the Brent Diabetes Service. It explored whether giving groups of people with similar culture and languages the opportunity to discuss managing their diabetes while on insulin, in conjunction with specific foods relating to their culture, could improve their blood glucose (glycaemic) control. It also worked with healthcare professionals in primary care to support people with diabetes, carers and families, as people registered with T2D differed in culture, food and languages spoken.

EQUALITY, DIVERSITY AND VARIATION

The project set out to provide equitable information to diverse ethnic groups, recognising needs differed in culture, language and food types for Afro-Caribbean, African and Asian individuals. Specific language was important to engage with the groups to discuss their cultural foods. In Brent (JSNA 2020) 80% of people diagnosed with T2D were of Black and South Asian ethnic groups. English was the main language for 62.8%, with other languages spoken being Gujarati (7.9%), Arabic (2.7%), Tamil (2.2%), Somali (2.0%) and Urdu (1.5%). Health inequalities, deprivation and health literacy needs were highlighted during COVID-19. Some people had no smartphone, internet or access to Information Technology and some relied on voluntary organisations or food banks for food. Brent had a diabetes prevalence of 12.0%, compared to England as a whole (8.9%), and more people with high HbA1c. One GP practice that offered a virtual group insulin session at the practice received no responses to 20 invitation letters and flyers. A Plan, Do, Study, Act cycle found people did not want to attend an ‘educational’ session. The word ‘education’ was removed from the flyer and access improved. A total of 30 people responded and 27 people attended. The practices held sessions via Microsoft Teams, with a translator, for people who spoke Tamil or Gujerati/Hindi.

INNOVATION

People with T2D on insulin continued to have high HbA1c. Local dashboard population health data indicated that approximately 13% of 29,515 people registered with diabetes had HbA1c over 75 mmol/mol. A search at five GP practices found 34% (216 people) with T2D were on insulin out of 628 people with HbA1c over 75 mmol/mol. Challenges included non-attendance at follow-up reviews, out-of-date or wrong contact details, a need for translators for people who spoke different languages, and face-to-face contact reserved for people who did not have access to technology for the virtual session. This project was an opportunity to target specific ethnic groups using their language, to discuss their cultural foods and how to manage diabetes while on insulin to improve blood glucose levels. The virtual group sessions were held at GP practices alongside a primary health care professional, to enhance partnership working. They aimed to upskill and involve people, their carers and families to implement a safe and effective care model. Participants were recruited from GP practices, with six to eight people per virtual group session. Google Translate was used to translate the presentation into Tamil and Hindi. The presentation design was simple, with pictures to reflect the words. Data were anonymised and collected in a spreadsheet for review of the post-session HbA1c results. The information accessed using the GP systems was managed by the Information Governance structure and individual patient discussion outcomes were recorded on the Trust system during the virtual clinics.

www.qualityincare.org/awards/diabetes
Evidence demonstrates that culturally-appropriate group education had an impact on HbA1c in the short term. Hence, this project looked at the local population and involved family in group discussions to share experiences and support behaviour change. Focus group session reviews indicated that, previously, 78% were unaware of their HbA1c level or what a normal level was. Fourteen females and 13 males attended the sessions, with a mean age of 59.9 years. The mean number of years with HbA1c above 75 mmol/mol while on insulin was three years. The mean HbA1c before the group session was 93.4 mmol/mol and post-session (approximately three months later) it was 65.8 mmol/mol, with the mean change in HbA1c 27.6 mmol/mol. This demonstrated improved outcomes from attending the session. Critical to Quality (CTQ) and Voice of the Customer metrics were used to improve quality and efficiency. Insulin group sessions specifically for Black, Asian and other ethnic communities, in partnership with health care professionals, showed a reduction of HbA1c. The groups should be considered as an option in primary care networks for helping to address health inequalities. Lowering HbA1c helps improve glycaemic control, which would be reflected in the National Diabetes Audit data. Reducing complications or admissions associated with hyperglycemia and hypoglycaemia, would bring wider cost savings.

USER FEEDBACK
The project was very well received, particularly for its focused approach. Health professionals who worked in partnership for the session said they provided simple, basic information for people to recap what they should be doing and were informative. To minimise bias, feedback was collected individually and within the group as CTQ metrics. The feedback demonstrated that virtual group insulin sessions in specific languages should be considered an option to support people with T2D.

DISSEMINATION AND SUSTAINABILITY
The learning from this project has been incorporated into clinical practice in providing virtual insulin group sessions in different languages with translators in the diabetes service. The health care providers involved plan to continue group sessions in conjunction with the specialist diabetes service support for primary care. The project only focused on the HbA1c target, to mitigate hypoglycaemia risks and safer use of insulin in primary care. The model can be implemented by primary care with support from specialist diabetes team working in the community. The learning should be scalable, sustainable, and cost effective, both in the shorter and the longer term. The virtual sessions could improve access for people with T2D on insulin from the ethnic minority groups to discuss insulin safety and cultural foods in their own languages. It would be easy to replicate this in primary care and in conjunction with the one-to-one service.

JUDGES’ COMMENTS:

“This entry from London North West University Healthcare NHS Trust was a demonstration of true patient engagement. It was a warm and caring project that focused on an under looked and under supported patient cohort. It had excellent results from a really compassionate team of HCPs. The feedback from carers and patients was strong and the team adjusted and amended as they went as a result of these to improve care.”
DIABETES EDUCATION PROGRAMMES – HEALTHCARE PROFESSIONALS

Delivering online competency-based training for the CamAPS FX hybrid closed-loop insulin delivery system by Cambridge Diabetes Education Programme (CDEP)

SUMMARY
Delivering standardised, easily accessible training at scale to healthcare professionals, people living with Type 1 diabetes and their families/carers is challenging, especially during COVID-19. High quality, structured training, with auditable outcomes, can empower people to make the best use of diabetes technology. The answer was to deliver competency-based training, improving competency, confidence and troubleshooting ability, using a digital, blended learning approach for a wide range of CamAPS FX hybrid closed-loop users. CamDiab commercially launched the CamAPS FX system in the UK in March 2020, after years of research at the University of Cambridge to develop the advanced closed-loop algorithm.

EQUALITY, DIVERSITY AND VARIATION
CDEP is a well-established online training platform utilised by over 30,000 healthcare staff in the UK to promote optimal standards of diabetes care and reduce variations in care. It is embedded in 40% of the CCGs in England and throughout Wales. The CamAPS FX training portal uses CDEP’s extensive e-learning IT functionality, which is underpinned by high quality, academically sound assessment techniques endorsed by the Cambridge University Health Partners. Online training offers users access when convenient to them, and allows them to revisit the training to refresh skills. A blended learning approach supports individual learning styles. The platform offers a good user experience from tablet, smartphone or computer, allowing wide access for all. Its ‘access on the go’ helps people complete training conveniently. When users register, they select a learning zone relevant to their role. Further resources can be downloaded as guides or templates. Automated reminder mechanisms invite users to return and complete the training. This reminder mechanism, certificate and rewards ensure that a high proportion (74%) of people who register complete at least one module.

INNOVATION
CamAPS FX closed-loop insulin delivery is the world’s first closed-loop app which works with continuous glucose monitoring (CGM) and an insulin pump to adjust insulin delivery and manage glucose levels 24 hours a day. It has been developed over 15 years and research studies prove its efficacy, safety and outcomes (reduced HbA1C, increased time in range, reduced time spent in hypos and improved quality of life). It is the only commercially-available system CE marked for children 1-6 years of age and during pregnancy, although it is suitable for all PWD. A novel training solution was needed to help healthcare staff, PWD and the wider care network learn about this cutting-edge diabetes technology. E-learning modules were created to refine skills prior to, and after, starting CamAPS FX: Carbohydrate counting refresher; Dana insulin pump refresher; CamAPS FX training; Post-start optimisation and Dexcom refresher training (in development). Each module includes multiple-choice assessment questions. Use of images and videos with written text supports people to engage on multiple levels. An 80% passmark was set to ensure competency. Modules are designed to complete in ‘bite-sized chunks’, accessible via a computer, smartphone or tablet, to fit into people’s busy lives. A module takes approximately 45 minutes to complete. Completing a module generates a certificate and reflection document. CDEP rewards entice people to undertake the training. The points accumulated unlock free or discounted resources, like Carbs & Cals diabetes posters, books and (coming soon) their new app. HCPs and PWD must complete the essential CamAPS FX training to obtain a unique training code that unlocks the CamAPS FX app. This ensures that users are optimally trained before starting the closed-loop system.
RESULTS

Large-scale support for a wide range of people to improve their closed-loop skills, confidence and troubleshooting ability is possible. The platform’s flexibility means it is often a preferred approach. CDEP’s HCP diabetes training site has extensive outcome reporting metrics which demonstrate the efficacy of the e-learning functionality and sets a benchmark against which to measure the new CamAPS FX training. The overall impact of CDEP training is assessed on a 5-point scale (1 = significantly worse, 2 = worse, 3 = no change, 4 = improved and 5 = significantly improved) across three domains (n=54,070). Average score: competency: 4.26; confidence: 4.23; guideline familiarity: 4.24. The CamAPS FX training is assessed on the same scale across three domains (n=808). Average score: competency: 4.39; confidence: 4.22; troubleshooting ability: 4.21. The respective training outcomes are similar, suggesting that the CamAPS FX training is of the same quality as CDEP’s. In addition, qualitative feedback is captured in the mandatory evaluation process and confirms that online training is well received. The training is free, allowing anyone access to the training. Research has shown that PWD with the best clinical outcomes utilising closed-loop therapy have the highest time spent in closed-loop, meaning the system is being used efficiently.

USER FEEDBACK

When users complete a module, they are required to complete evaluation to generate the certificate, reflection document and CDEP rewards. Feedback is obtained via structured questions and free-text entry. All feedback is reviewed and acted upon to continually develop the learning experience. A qualitative feedback example from a diabetes HCP: “A user-friendly, well-written resource with a clear framework to help understand the CamAPS FX system.” User feedback is also obtained via email and online chat support. Email and online chat is used to troubleshoot and support users. The online training platform and content were reviewed by Diabetes UK and the JDRF and both have given endorsement.

JUDGES’ COMMENTS:

“This entry from CDEP was designed to be developed quickly and was very accessible. The results demonstrate improved competency, confidence and troubleshooting ability. Modules were created for all education levels, which was appropriate for the wider user audiences. It was a really high-quality educational product with excellent safety procedures, plus the different learning zones were fantastic.”

DISSEMINATION AND SUSTAINABILITY

The training platform was developed and tested by the CamDiab clinical team, external expert diabetes HCPs and the target user group prior to making it public in January 2020. The CamAPS FX system has been commercially available in the UK since March 2020. To date, 1,058 users have registered on the site. User numbers are growing at the rate of 75-106 new users each month and 808 modules have been completed. The platform also offers access to 11 themed webinars. The training offers an auditable, standardised and scaleable approach which includes inbuilt safety mechanisms preventing use of the technology without adequate training. It meets the needs of a variety of users in a timely manner, no matter how quickly demand grows, compared to delivering traditional face-to-face training.
HIGHLY COMMENDED

DIABETES EDUCATION PROGRAMMES – HEALTHCARE PROFESSIONALS

COMPLEMENT PLUS
by Eden Leicester Diabetes Centre

SUMMARY
After being awarded ‘highly commended’ at QIC in 2019, the diabetes training programme for clinical pharmacists, COMPLEMENT (COMPLEte MENtoring for clinical pharmacists) was rolled out across Leicester and Leicestershire. The COVID-19 pandemic meant the programme had to be adapted quickly into COMPLEMENT PLUS - an easily accessible, fully virtual, diabetes training programme for clinical pharmacists, relevant to all during a pandemic. Updating of the programme began in March 2020 and the first cohort took the course in June 2020. It consists of four pre-recorded lessons, four e-learning modules and four virtual mentoring sessions, and has replaced the original COMPLEMENT programme.

EQUALITY, DIVERSITY AND VARIATION
Leicester is culturally diverse, with 340,000 people who speak more than 70 different languages and dialects. Its diabetes prevalence is among the highest in the UK at 8.9%. Work with the Centre for Ethnic Health Research, based at the diabetes centre, aims to reduce variations in care and reduce adverse diabetes-related health outcomes. A total of 35 pharmacists were trained under the COMPLEMENT PLUS programme over the year. Of these, four were of African-Caribbean descent, 17 were South Asian, six were Eastern European and eight were white British. Half were male and half were female. The cultural diversity was a real advantage during the group mentoring sessions. Challenges regarding language when communicating with patients in clinic, signposting where to access information for patients in other languages, and how to use the interpreting systems were addressed. The virtual platform enabled wider access to pharmacists. Mentoring discussions covered the challenges of working in more deprived areas, how to reach ethnic minority communities and training faith leaders or employers to become ‘health advocates’.

INNOVATION
The COMPLEMENT programme proved that clinical pharmacists, given the required training, could effectively care for people living with diabetes. A more sustainable training programme was needed to support and utilise pharmacists to help all people living with diabetes during a pandemic. The increasing incidence of diabetes, and associated increase in morbidity and mortality, also had to be addressed. COVID-19 also seemed to target those with diabetes, comorbidities and obesity and was more prevalent in people from minority ethnicities and/or areas of deprivation. Pharmacists needed training to minimise risk in these patients. The new diabetes training solution was COMPLEMENT PLUS, developed in consultation with 100 clinical pharmacists working in Leicester. The modules were aligned to the UKPCA competency framework for Diabetes. A ‘knowledge and confidence’ questionnaire was used to highlight training needs and subsequently to measure the programme’s success. Pharmacists felt isolated and needed support and reassurance, so the training contained a supportive mentoring element. The blended learning approaches catered for all learning styles. The recorded lessons were both visual and audible. The e-learning modules were interactive, incorporating quizzes and challenges with a post-course test. The mentoring sessions provided time for peer reflection, experience sharing, questions and discussion.
COMPLEMENT PLUS is very much aligned with the national agenda of getting pharmacists into primary care and it responded really well to the changes with mentoring. This project was about connecting with other people and putting them in touch with a mentor and the innovation was clear. There was great awareness of the role of pharmacists in the process. The entry was really solid and well written.
DIABETES EDUCATION PROGRAMMES – HEALTHCARE PROFESSIONALS

ACADEMY
by Diabetes Technology Network

SUMMARY
Academy is an interactive, free-to-access, online education platform, developed by clinical leaders in the Diabetes Technology Network with Glooko, to improve access to technology across the country and training for healthcare professionals. It provides high quality, CPD-approved and NHS England-endorsed training on diabetes technologies. It aims to reduce inequality in access to technology by providing education in bite-sized chunks that individuals can undertake at their own pace. Primarily aimed at specialist teams, it is also also available to community and primary care teams. The platform contains 58 topics with 368 micro-learning videos spanning a total of 27 hours of content.

EQUALITY, DIVERSITY AND VARIATION
Access to technology is much lower in those from lower socio-economic backgrounds and those from ethnic minorities. While this project focused on providing diabetes education to HCPs, the ultimate aim is to address equality of access to diabetes technology across the country. With better education of clinical teams, and education on diabetes technology for the wider group of clinicians who see people with diabetes, the hope is to reduce this variation. The course content ranges from the basics of managing multiple daily injections, and using data downloads to review glucose data, through consultation skills to complex interventions, such as the latest closed-loop therapies. Different modules target clinicians with different levels of training.

INNOVATION
Studies demonstrated the value of diabetes technology in supporting people with diabetes to achieve target glucose levels. However, National Pump Audit data shows large variation in access across the country, and the 2020 NHSE GIRFT report identified a deficit of appropriately-trained healthcare professionals (HCPs) as a potential barrier. A lack of appropriate educational resources, and time for staff to undertake training, were acknowledged problems. There was a need to develop high quality, easily accessible and accredited educational material. Following recent initiatives from NHSE, including roll-out of Flash glucose monitoring and Continuous Glucose Monitoring in pregnant women with type 1 diabetes, NHSE approached Diabetes Technology Network - UK to develop an accredited training programme for clinicians and patients and to support uptake and appropriate use of diabetes technologies for type 1 diabetes. The Academy programme is primarily aimed at specialist teams, but is also accessible to community and primary care teams. The platform contains 58 topics with 368 micro-learning videos spanning 27 hours of content in seven CPD-accredited courses certified by ABCD. Learners can acquire knowledge at their own pace in their own time. What was innovative was the collaboration between HCPs, industry and people with diabetes to use digital technology to deliver education at scale, in a way that was device agnostic and incorporated sophisticated reporting functionality, to measure the uptake on a regional level and potentially link this with outcomes for people living with diabetes. A novel funding model allowed the project to be delivered free of cost to the NHS through industry sponsorship, while retaining editorial independence and lack of bias. Another unique aspect was that the same videos (without the micro-learning and assessments) were available free to people with diabetes via the Diabetes Technology Network website. This coordinated approach of providing the same education to HCPs and people with diabetes was challenging, but helped patients and HCPs to share knowledge.
**RESULTS**

The key outcome of this project was the reach to relevant clinicians and uptake, in terms of numbers of courses taken and certificates gained. Based on the RCP UK 2019 census, there were 1,089 consultants and 451 trainees and TREND-UK’s 2019 survey identified 1,872 diabetes specialist nurses. Data suggest almost 20% of all HCPs working in diabetes and endocrinology have accessed this education platform. Within six months of launch, 588 HCPs had started 655 courses. Now, 384 courses have been completed, with 25,859 individual learning videos seen, equating to over 1,000 hours of content watched.

**USER FEEDBACK**

The high degree of uptake and content viewing provides a degree of feedback on the demand for such content and the quality of the content produced. Individual feedback includes: “Please can we make this mandatory for all trainees?” (Dr Reza, trainee from Newcastle); “Slick, professional and well elucidated. Good, varied range of topics. Easy to go through - and some good learning points for all - beyond the realm of technology.” (Prof Partha Kar from NHSE). At a talk about Academy at the annual DAFNE collaborative meeting, many of the nurses posted comments on the modules they had completed. This project brought together industry colleagues, NHSE, the Diabetes Technology Network and the diabetes specialist nurse network.

**JUDGES’ COMMENTS:**

“The ACADEMY project was an innovative, national level project that addressed a clearly identified gap in training. Its innovation shone through with good uptake and an impressive range of technologies covered at different levels. It was free for HCPs and in bite size chunks so time had been factored in. The judges liked that there was collaborative co-production and that the video content was available to all. Particularly impressive was the fact it involved NHS England and it has potential to disseminate knowledge.”

**DISSEMINATION AND SUSTAINABILITY**

This project was national, with a view to providing equity of access to education on diabetes technology across the country. The agreement with Glooko and DigiBete allows content to be updated and adapted in response to changes in diabetes technology and feedback from users. Data on uptake of the education programme are posted on social media, which encourages further uptake. The data are reported to NHSE on a three-monthly basis so that areas of low education uptake can be identified and supported to increase uptake.
SUMMARY
The COVID-19 pandemic meant Dose Adjustment For Normal Eating (DAFNE) patient courses and healthcare professional training had to move away from face-to-face courses. A Remote DAFNE patient course was created (April-July 2020). It comprised a five-week blend of self-directed online learning and structured virtual group sessions, facilitated by a DAFNE educator. Existing educators were trained via a virtual conversion course (RCC), developed in parallel to the Remote DAFNE course. It has been delivered to 303 educators. The Remote DAFNE Educator Programme (RDEP) and Remote DAFNE Doctor Programme (RDDP) were produced to replace in-person workshops.

EQUALITY, DIVERSITY AND VARIATION
Completion of the RCC, RDEP and RDDP requires access to WiFi and a PC/tablet to complete both the online learning and virtual workshops. The RCC enabled existing DAFNE services to deliver the Remote DAFNE course to PWD, to continue access to DAFNE training during the pandemic. The RDEP and RDDP not only enabled additional educators and doctors from existing DAFNE centres to train but, importantly, enabled training for new DAFNE centres, increasing access of DAFNE to more PWD. Seven new centres came on board during the pandemic. The virtual nature of the RCC, RDEP and RDDP made it easier for HCPs to train and for the national training team to deliver the training. In addition, RCC training was provided to DAFNE colleagues in Oz DAFNE (Australia, New Zealand and Singapore) and DAFNE Kuwait. Further online units could be shared with members of the wider diabetes team, who had not completed an educator or doctor training, ensuring PWD received the same messages using the same language as DAFNE trained team members, ultimately improving service user experience. The RCC, RDEP and RDDP training programmes were highly rated by trainees.

INNOVATION
For the Remote DAFNE course to be piloted and rolled out to people living with diabetes (PWD), DAFNE HCP training programmes needed to be developed for existing educators, new educators and new doctors. These had to be accessible but also of quality. A RCC that could be delivered virtually was required, highlighting the differences between it and the the face-to-face DAFNE course, along with training on how to facilitate the virtual group sessions. An educator training manual/curriculum, course timetable and lesson plans for each of the five structured weekly virtual group support calls in the Remote DAFNE courses were created. The RCC (piloted July 2020) involved self-directed review of the educator manual/lesson plans and completion of a 3.5 hour virtual workshop facilitated by a national DAFNE trainer. Educators completed an anonymous SurveyMonkey feedback questionnaire after each week of the Remote DAFNE pilot course. The RCC was not suitable for training new DAFNE educators. Units were adapted as necessary, including facilitation of virtual group sessions and tricky participant behaviours. Scripted scenarios were created, role played and videoed. A trainee course observation workbook was created for completion when watching the course observation videos. The Remote DAFNE Educator Programme (RDEP) was piloted Oct-Dec 2020. In parallel a Remote DAFNE Doctor Programme (RDDP) was developed, incorporating some of the course observation videos created for the RDEP. The RDDP was piloted Nov 20-Mar 21. Anonymised evaluation SurveyMonkey questionnaires were sent to all pilot RDEP and RDDP trainees.
RESULTS

The RCC was piloted with 91 existing educators from 38 DAFNE centres that volunteered for the pilot. These educators delivered 62 pilot courses between 20 July and 4 August; 227 PWD commenced the course and 201 (89%) completed all five weeks, with a retention rate similar to that of face-to-face courses. All the educators rated the RCC as useful for preparing them to deliver the Remote DAFNE course (33% very useful, 61% useful and 6% OK). To date 303 existing DAFNE educators (61%) from 78 DAFNE services have completed the RCC. The RDEP was piloted with 47 trainee educators, 45 of whom successfully completed all assessments and became DAFNE educators. Following positive feedback the RDEP was rolled out, with a further 62 educators completing the training. In total 109 new DAFNE educators from 51 DAFNE centres have been trained via the programme. The RDDP was piloted with 60 doctors. Compared to previous face-to-face HCP training, the new remote programmes resulted in resource/cost savings to the national programme.

USER FEEDBACK

All participants in the pilots of the RCC, RDEP and RDDP were asked to provide anonymous feedback. National trainers reviewed the collated feedback for each pilot, amending the programme as appropriate. The trainers delivering the courses compared their own experiences to highlight improvements.

DISSEMINATION AND SUSTAINABILITY

DAFNE is a national, ‘off the peg’, structured education programme, open to any diabetes service wanting to offer it that joins the DAFNE consortium. As all the training in Remote DAFNE is provided online, location of trainees is not an issue. The RCC and RDEP are only available to HCPs at DAFNE centres. To date 303 (61%) of existing DAFNE educators from 78 DAFNE services have completed the RCC; 109 new DAFNE educators from 51 DAFNE centres have been trained via the programme. RCC training has been given to DAFNE educators from DAFNE Kuwait and Oz DAFNE. Unlike educator training packages, the RDDP is open to any doctor, even those from non-DAFNE centres. Of the 81 doctors who completed the RDDP, 72 were from 38 DAFNE centres, two were from DAFNE Kuwait and seven were from non-DAFNE services. The creation of the RDEP and RDDP for the training of new educators and doctors enabled seven new diabetes services in the UK and ROI to come on board during the pandemic, enabling them to deliver the Remote DAFNE course to PWD in their service. The success and feedback from the Remote DAFNE course indicate that this will remain a delivery option post pandemic. Further online and virtual training programmes will be developed for both PWD and HCPs. The RDEP has CPD endorsement from the British Dietetic Association. An application has been made to the RCP for CPD accreditation for the RDDP.

JUDGES’ COMMENTS:

“This project took what was already in place and moved it online. The judges liked that training was offered internationally and that feedback was used to make improvements. The changes really opened it up to a wider audience and it felt much more accessible. It was executed amazingly well with strong results.”
PATIENT CARE PATHWAY, SECONDARY AND COMMUNITY

Diabetes Digital Monitoring: Building Back Better to Support Nursing Teams, Reduce Healthcare Inequalities & Empower Patients
by University Hospitals Coventry & Warwickshire NHS Trust

SUMMARY
Inpatient flash glucose digital diabetes monitoring has been implemented across the NHS Trust. This approach was designed in response to COVID-19 and achieved across a tertiary hospital, with devices offered to 350+ patients at the pandemic peak. The innovation allows closer monitoring of glycaemic control for at-risk patients with diabetes and COVID-19, empowers patients to manage their sugar levels, reduces inequalities in access to diabetes technology, supports overworked ward nursing teams and reduces exposure of staff to COVID-19. Patient and staff feedback was positive.

EQUALITY, DIVERSITY AND VARIATION
Over 350 people from the digitally neglected group were offered devices. Analysis showed 41% were people of an ethnic minority background. Wider implementation will help reduce the digital divide, particularly as the project is expanding to those recently discharged from hospital. Results demonstrate that those of an ethnic minority background readily adopt diabetes digital technology if it is presented in the correct way and appropriately supported. The average age of the cohort was 67.4, demonstrating that age should not be considered a barrier to adoption. Finally, 61% of the cohort were male, a population shown by the National Diabetes Audit to be underserved with diabetes digital technology. Importantly, the inpatient cohort had not previously been considered for flash glucose devices, despite calculations demonstrating cost effectiveness based on the time saving to nurses alone. The intervention reduced variation, being offered to all people with diabetes. The funding to extend the project explicitly looks at further reducing inequalities and also directly involving nursing teams in innovation and research.

INNOVATION
During the COVID-19 pandemic, increasing numbers of patients needed glucose monitoring. Inpatient use of Freestyle Libre digital devices was proposed to empower patients to monitor their own sugars whilst in hospital, reducing nursing time spent on monitoring and reducing nursing exposure. The use of such devices in the UK is typically only funded for outpatient monitoring of people with T1DM. This population is typically white, young, and applies pressure through social media. Patients admitted to hospital requiring monitoring are commonly older, of diverse ethnic backgrounds, with multi-morbidity and are less digitally savvy. Introducing inpatient flash glucose monitoring would reduce inequalities in access. The project’s success meant its continuation beyond the pandemic. UHCW NHS Trust is the only one nationally to offer widespread inpatient flash glucose monitoring. Notably, with over 17% of inpatient beds occupied by people with diabetes, this initiative offers a remarkable opportunity to drive efficiency. The team worked with Abbott, the Trust’s Gold Command Group (including Chief Officers) and Nursing Leadership to roll out monitoring to all inpatients in the Trust with COVID-19 and diabetes. Abbott helped with deployment, taking into account factors such as X-ray, CT and MRI exposure, information governance and infection control. A ‘train-the-trainer’ package was developed for nurses, alongside bespoke patient and staff information leaflets. A distribution and troubleshooting system was established across the 1,100-bed organisation and re-use of the handheld monitors was enabled. A COVID-19 Action Fund Award from the Winston Churchill Memorial Fellowship Trust supported wider roll-out and evaluation.
RESULTS
Flash glucose devices have been distributed to over 350 inpatients since April 2020. Of 69 staff who used them, 88% reported that they were 'extremely easy to use', 94% reported that they were very effective or extremely effective at reducing exposure to COVID-19, and 99% strongly agreed that the devices saved time compared to finger-prick blood glucose monitoring. Based on known prevalence of diabetes in hospital, the initiative can save between 112 minutes and 168 minutes per ward per shift (72 hours per month). The devices are simpler and require less dexterity than blood sugar monitoring and patients can check their sugar on demand. Feedback from patients has been positive. A total of 41% of responses were from patients of an ethnic minority background. Most required monitoring for T2DM or steroid induced diabetes, cohorts currently excluded from NHS funding for these devices. Patients’ suggestions led to development of a multi-language information pack for patients. Liaising directly with frontline nursing teams who were using the devices during their regular clinical work allowed optimisation of device distribution and training methods. As the project expands, the aim is to engage frontline nurses with protected time to be involved in the innovation. This includes 50% of an awarded Winston Churchill Trust Grant protected for nursing time to dedicate to this work, and an ambition to support two nurses to apply for further funding to undertake international fellowships dedicated to digital inpatient monitoring.

USER FEEDBACK
Qualtrics software and a bespoke collection tool collated patient perspectives. Of the original 350 patients first offered devices, 213 provided responses. A total of 94% reported no challenges with sensor application; 87% reported they preferred the flash glucose system to finger-prick monitoring; 68% felt the devices gave them greater control whilst in hospital, and 79% reported the devices gave them greater confidence in using them. Nursing staff feedback is reported in Results above.

DISSEMINATION AND SUSTAINABILITY
This project is sustainable, demonstrated by its cost effectiveness in terms of: time saved over finger-prick blood glucose testing and the cost of devices being significantly less than the calculated cost of nursing time saved. Sustainability is ensured by creating an online virtual education package to support low cost, rapid training of ward nurses, which cascaded in a train-the-trainer model. The industrial partner funded and hosted a regional training session to support wider adoption. Two papers have been submitted to journals to support dissemination of the work. The Winston Churchill Memorial Trust Grant will support the direct ambition of disseminating the intervention nationally across the NHS. This includes a robust health economic analysis and dissemination toolkit that should transform inpatient blood glucose monitoring and bring a culture change in approach to diabetes digital technology in the hospital. The aim is to develop a consensus statement supported by ABCD, Diabetes UK, YDEF and DISN to support this further important dissemination work.

JUDGES’ COMMENTS:

“The judges agreed that this entry was admirable as it seemed really simple when first read, but is easily scalable and leaves you thinking ‘why has no-one done this before?’. The project was clearly impressively organised and coordinated, with evaluation very well planned. It achieved an impressive amount, including low-cost online training, improved patient comfort (feedback like patients not having to be ‘manhandled’ for finger pricks or woken up during the night) and empowerment, while reducing pressure on scarce nursing time and reducing risks of exposure. It was also impressively cost-effective. With regional dissemination and ongoing funding already in place and clear plans laid out for further national and international reach, this project, born out of a clearly identified need during a pandemic, also makes a strong case for reducing the existing digital divide. The judges look forward to hearing about future developments and achievements of this impressive work.”
COMMENDED

PATIENT CARE PATHWAY, SECONDARY AND COMMUNITY

Validation and feasibility of a postal system for remote monitoring of HbA1c
by East Suffolk and North Essex NHS Foundation Trust Ipswich Hospital

SUMMARY

Haemoglobin A1c (HbA1c) measurement is important for monitoring glycaemic control in people with diabetes (PWD) but, during the COVID-19 pandemic, access to an up-to-date HbA1c measurement for PWD was challenging. An innovative and cost effective at-home capillary blood collection system was needed, which was accurate, reliable and user friendly for patients. After development and validation, 286 postal HbA1c kits were sent to PWD in October-December 2020. The return rate was 87%. Subsequently the project has been integrated successfully into the diabetes service and 905 kits have been sent to PWD, with an encouraging return rate of 80%.

EQUALITY, DIVERSITY AND VARIATION

The postal HbA1c service reduced the number of appointments patients needed at hospital and maintained care levels. The kits were particularly beneficial to shielding patients. Emphasis was put upon creating a simple blood collection method that required little dexterity and mirrored the PWD’s usual blood glucose monitoring. Only a small sample was required (approximately five drops), which helped those who found it difficult to bleed to use the service. The postal HbA1c kits were mainly sent to adults (19+ years) but were also sent to some children/adolescents in extenuating circumstances. The age range was 5-92 years, with all successfully collecting an analysable sample. Patients with sight issues were contacted prior to sending a kit to ask if they required further assistance in collecting their sample. Most could collect a sample independently. A large print version was in development. Patients with cognitive issues or in care homes were assisted by family members or carers. Frail and at-risk patients also benefited, providing a valuable result that would not have been obtainable otherwise. A video guide was being produced, to aid those with language/literacy barriers.

INNOVATION

The need for social distancing and patient hesitation to attend healthcare facilities made it difficult to obtain a HbA1c measurement for use at the virtual consultation. A remote HbA1c monitoring solution needed to demonstrate accurate, reproducible results and to be user friendly for both staff and PWD. A postal HbA1c system was designed for patients to take a blood sample at home at their own convenience. This was returned in secure packaging and tested on the centre’s two point-of-care Siemens DCA Vantage analysers, which provided reliable results within six minutes. These analysers had been used in the Diabetes Centre for over 20 years and were available in clinics throughout the UK. Each remote kit cost £2.63 per patient, including supplies and postage. This was significantly more cost effective than other remote blood collection methods. For accuracy determination, 123 small capillary blood samples (5-10 drops) were independently collected. Samples were tested on the day of collection on the Siemens DCA vantage analyser, stored at room temperature for up to 12 days and then tested again. Once accuracy was determined, postal HbA1c kits were designed to meet the Packing Instruction 650 regulations that govern the transport of biological substances. Kits included the equipment and photographic instructions to aid PWD to collect a small sample of blood from their finger, and instructions to safely package and post their sample back. Feedback forms were included. This was the first methodology developed to obtain a blood sample from PWD at home that provided reliable, accurate HbA1c results.
RESULTS
The accuracy testing for the stored blood samples was successful. During October-December 2020, 286 kits were sent out to PWD requiring an HbA1c prior to their virtual consultation. Of the 210 returned kits (73%), only one sample failed. Of those who did not provide a sample, some had already had a recent HbA1c, were out of the country, or had deferred their appointment. Removing frequent non-attenders, the return rate was 87%. To date, 905 kits have been sent, with a return rate of 80%, demonstrating continued engagement. The remote HbA1c testing ensured no backlog of appointments during the pandemic, and enabled 2,385 virtual clinic appointments from October 2020 to June 2021. Phlebotomy and HCA time was better used and no additional staffing was needed. Phlebotomy patients who chose not attend in person were provided with a postal HbA1c kit. The postal HbA1c is significantly less expensive than other alternatives, with a small cost implication for non-returned kits.

USER FEEDBACK
The overwhelming majority of feedback from PWD and clinicians was positive. Of those who returned initial feedback forms, 94% agreed that they would use the kits again. From December 2021-June 2021, 87% of PWD who provided feedback would use the postal HbA1c again and 5% would not. A five-point Likert scale survey, with an additional two free-text questions, was sent to diabetes consultants, dietitians, diabetes specialist nurses and diabetes research nurses who used the postal HbA1c system for their patients. Of respondents, 100% strongly agreed that the service has been useful during the pandemic and had positively impacted patient care. They felt the new pathway was efficient and would remain useful after lockdown. 100% said they would recommend the service to other clinicians and strongly agreed or agreed that it would be useful to offer the postal HbA1c to other patient groups.

DISSEMINATION AND SUSTAINABILITY
The postal HbA1c project gave clinicians access to vital, up-to-date HbA1c measurements where, in some cases, there was no alternative. This both sustained and improved patient care during the pandemic, whilst protecting vulnerable patients and reducing footfall into the hospital. The simplicity of the methodology has allowed a wide cohort of PWD to benefit. The cost and time burden of attending an appointment face to face is reduced, helping to prevent health inequalities. Many PWD would benefit from the convenience of collecting and posting a sample at a time that fits in with them, helping them to take control of their own healthcare. The process requires little training to run smoothly and needs minimal equipment. A comprehensive system of letters, text message reminders and planning has contributed to a successful return rate. It could be adopted into other diabetes care settings and may be of value within other patient groups.

JUDGES’ COMMENTS:

“This is a great example of a project implemented during COVID restrictions, but has ongoing value even after restrictions have been lifted. It is mainly feasible in specialist teams who have existing equipment for HbA1c testing, although this may mean that seeing people face-to-face (typically more complex) is preferable. Impressive validation work. It has excellent clinician feedback with evidence of sustainability.”
PATIENT CARE PATHWAY, SECONDARY AND COMMUNITY

The only DSN in the Village
by Medway NHS Foundation Trust

SUMMARY

Diabetes care in Medway was improved by providing specialist care within the GP surgery. This reduced waiting times for appointments, duplication, and delays to prescriptions, speeded referrals, and improved communication between services. A diabetes specialist nurse (DSN) was seconded from secondary care into a primary care network as a pilot project for two years. The main requirement was to assess patients with HbA1c above 75 mmol/mol. Within 12 months the HbA1c of 159 patients was reduced by between 9-95 mmol/mol, and at 18 months the DSN had reduced the overall HbA1c by 9 mmol/mol per patient across nine practices.

EQUALITY, DIVERSITY AND VARIATION

Each month the DSN identified patients across the PCN with a HbA1c above 75 mmol/mol using PARM. The DSN time was spread across the nine GP surgeries, ensuring all had the access they required. The tool also highlighted patients who might need further support from surgery staff and was sent out monthly to the GPs and practice nurse responsible for diabetes each month. This ensured variation in care was minimised as all patients with a HbA1c over 75 mmol/mol were contacted regardless of location. GPs used the remaining slots for other patients. At least 89 of the 659 people involved in the study were recorded as being from an ethnic minority background on EMIS (13.5%), although the total may be higher. The percentage of ethnic minority participants involved in the study was higher than the amount recorded in the local population (13.5% vs 5%). The PARM tool found the people who needed the most support, irrespective of cultural background. A higher-than-average number of people from a minority ethnic background were identified as requiring DSN support. Demographic data from this study were highlighted across the Kent and Medway Strategic Transformation Partnership to help raise awareness of the needs of people with diabetes from ethnic minority backgrounds in Medway.

INNOVATION

A new clinical post was developed to replace some of the care usually provided by the community DSN team. The new post worked within Rainham primary care network (PCN), offering specialist diabetes care directly within the GP surgeries. The post was a secondment from secondary care, with access directly to the consultants for complex cases, reducing the lengthy referral process and, in some cases, avoiding referrals to the consultants altogether. The aim was to bring all three services together in one initiative. The clinician had access to all the systems and clinical colleagues in both primary and secondary care, further breaking down barriers. The DSN had EMIS, AccuRX and DXS installed on the hospital laptop to work remotely. A new PARM tool was used to extract data from EMIS to identify patients who required DSN support. Patients were then booked in to virtual appointments. Those who required insulin or GLP-1 starts had video consultations. Patients were given the pen device, equipment and literature in advance so they could complete the steps with DSN support on the video call. For more urgent cases, literature was emailed as a PDF. Those unable to use video calls had a face-to-face appointment with full COVID-19 protection.
RESULTS

At 12 months, 465 patients had accessed the DSN service. A total of 243 patients had follow-up data available at the time and 159 of them saw a reduction of HbA1c (between 9-95 mmols/l), with 93 of those also seeing reduced cholesterol (between 0.2-5.8 mmol/l) and 89 patients having a reduction in blood pressure (between 1-47 mmhg). At 18 months, 659 patients had accessed DSN support. Of these, 359 patients had follow-up data. The average HbA1c reduction calculated for the nine surgeries for those patients was 9 mmols/mol (0.81%) per practice, with some practices achieving as high as 17.1 mmol/mol (1.9%) average reduction. The initiative has brought many benefits for both patients and GP staff. Questionnaires were sent to 300 participants who had been in the service for over nine months and Canterbury Christchurch University conducted interviews with 12 of the respondents. The patient population valued the specialised service within the GP practice at a time where the risk of death from COVID-19 in people with diabetes dominated the media.

USER FEEDBACK

Feedback was collected from stakeholders via an anonymous SurveyMonkey survey sent to all clinical staff in the GP surgeries. A total of 59% said the PCN DSN service met their needs ‘extremely well’, 65% said responses to referrals, questions or concerns had been ‘extremely responsive’ and 65% were ‘extremely likely’ to recommend the service to a patient. Regarding referral of patients to the new service, 71% said it was ‘extremely easy’, while 65% reported that their knowledge and confidence in managing people living with diabetes had improved. Patients reported satisfaction with the service too.

DISSEMINATION AND SUSTAINABILITY

Data from the first 12 months of this project were presented at the diabetes professional care conference. This project shows what can be achieved across a PCN for a minimal cost. Once qualitative data from the patient interviews is analysed findings will be published in peer-reviewed journals and presented at more national conferences. Having a DSN in the practice has highlighted the need for specialist support within GP surgeries. A new ‘Best practice in the delivery of diabetes care in the primary care network’ has been released, and Medway hopes to be one of the first PCNs in the country to adopt the new guidelines by developing a Diabetes Support Team (DiaST). This will be a new enhanced tier taken from the existing PCN workforce providing care with an MDT approach. As a gold standard, practitioners within the team should include: a GP with an extended role in diabetes (GPwER); a Practice Nurse with special interest in diabetes; a Clinical Pharmacist (RPS Advanced Stage 2), and a Community/Intermediate Diabetes Specialist Dietitian.

There should also be access to mental health services and strong communication links with the secondary care integrated team.

JUDGES’ COMMENTS:

“The judges liked the idea behind this entry from Medway NHS Foundation Trust, which showed a great amount of work done primarily by one person. It was phenomenal and reached a lot of people, plus offering education for the staff. It was innovative and worked.”
MIND AND BODY HEALTHY TOGETHER - EMOTIONAL WELLBEING PROGRAMMES FOR PEOPLE WITH DIABETES

Keeping young people connected during COVID-19: Adapting the Tree of Life group to run online
by University College London Hospitals NHS Foundation Trust

SUMMARY
The COVID-19 pandemic disrupted the lives of young people living with type 1 diabetes, with limited or no face-to-face contact with healthcare teams. The Tree of Life groups (QIC finalist 2013) had been run in person at UCLH since 2010, helping young people to develop positive views of themselves, connect with others and improve diabetes management. The groups were adapted to be delivered online, focusing on fun and creative ways of connecting young people with each other. Between July 2020 and June 2021, three Tree of Life groups, one ‘peer trainer’ event and a professional training event were held virtually.

EQUALITY, DIVERSITY AND VARIATION
UCLH paediatric and adolescent diabetes service has many patients who live a long distance from the hospital. For some, attending a group at 10am was costly, and potentially a barrier to accessing group support. Zoom was used to run Tree of Life online groups, allowing young people to join from home, without any travel time. This made it easier for many to attend. Across the country there is significant variation in provision and access to psychological support. The Tree of Life online group is available to any young person under the service aged over 12 years (two online groups are available for younger children). They do not need to have been referred to psychology. The group is promoted by the diabetes team, on the team website and via the DigiBete website. The format was developed in collaboration with peer trainers and adapted based on attendee feedback. Participants are called prior to the group so any additional support can be put in place, plus it helps put the young person at ease. The Tree of Life has been developed and used in multiple cultures and settings.

INNOVATION
The Tree of Life enables young people to share problems and solutions in ways that make them stronger by connecting with their strengths, abilities, hopes and dreams for the future. It has been used across multiple cultures, settings, and ages. Additionally, young people can become ‘peer trainers’ who facilitate groups. A sense of safety and connection between participants is crucial. When planning the online version of the group, it was important to find fun and creative ways of connecting young people with each other. This meant creating opportunities for the ‘social micro-interactions’ that can be lost when not meeting face to face; not ‘getting locked up in the screen’, and involving an art therapist to co-facilitate a peer trainer event. Young people were involved in the adaption and development of the online group, which was adjusted according to their feedback. Packs were sent in the post to ensure everyone had all the materials they needed, as well as to create excitement and intrigue. All groups were evaluated with telephone feedback calls/questionnaires, to make comparisons with outcome data from the face-to-face group.
RESULTS

Three online Tree of Life groups were run between July 2020 and February 2021, attended by 21 young people aged 12-19. The group initially ran as two half days but, based on feedback, changed to a one-day group. Some key adaptations included taking time before the groups to speak to each participant to ensure they were comfortable attending and using the technology. Emails helped young people know how to attend and what to expect. Packs were sent in the post with pens, paper, fruit stickers and a welcome letter. Another adaptation was to allow lots of time to create connections. Peer trainers helped facilitate ice breakers, including scavenger hunts, sharing important objects, and using small breakout rooms. Young people drew their own trees to share on screen for others to discuss. Online white boards and screen sharing of slides helped document and capture the ideas and wisdom shared by the group on responding to the challenges diabetes could bring. One peer trainer online event was run, attended by 13 young people who were, or wanted to become, a Tree of Life peer trainer. Packs of art and craft materials were sent out and an art therapist co-facilitated the day where young people made their own trees and origami birds. Online attendees rated the groups as: 9.5/10 - likely to recommend to a friend (face-to-face 9.16); 8.5/10 - usefulness of sharing experiences (face-to-face 9.19). Qualitative data from the online groups indicated similar themes to the face-to-face groups. Young people generally found the online platform accessible but a few had connection problems. Overall, the online group had similar positive feedback to the face-to-face group. Most said they did not mind if future groups were face-to-face or online, or felt both options should be offered. Learnings were disseminated via three online training session about creative approaches to running groups online. The training for paediatric psychologists in Scotland was rated as 9.5/10 to recommend to a friend and 4.7/5 overall. An article on keeping young people connected through online groups was published and a further article was being written on adapting the Tree of Life.

USER FEEDBACK

Following the Tree of Life groups young people were contacted to complete a questionnaire over the telephone by members of the psychology team who were not the lead facilitators (to reduce bias) and to share feedback on the day. Feedback was positive, with young people feeling more confident and supported with their diabetes.

DISSEMINATION AND SUSTAINABILITY

As detailed above, learnings in moving to online service delivery have been shared with other paediatric services, which will benefit many young people living with type 1 diabetes, and other health conditions. The Tree of Life peer trainer programme enabled young people to stay part of a community after attending a group, and the online platform seemed to make this even more accessible. The peer trainers wanted to meet more often and another event has been organised. This experience has encouraged the development of new online groups, including a pilot group called DiaMeetees, for 9-11 year olds, which had a positive reception and will be run again.

JUDGES' COMMENTS:

"Overall this is a very interesting project and it is great to see how the pandemic as moved innovation forward and created the opportunity to provide new opportunities for young people with diabetes to connect. The context and objectives are really clear and these connect well to the results presented. When considering the accessibility from and equality and diversity perspective, it is a strong reflection about the previous barriers to access, including travel time and resource to attend."