CASE STUDIES 2020
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Prevention, diagnosis, and treatment of diabetes in the UK has never been more important with a 60% increase in the condition’s incidence over the last decade and the associated increase in mortality and morbidity that we know is associated with the condition. Recently, we have also become aware that people with diabetes have an increased vulnerability to severe outcomes from COVID-19 related to glycaemic control, body weight and the comorbidities which often accompany diabetes. This is a stark reminder of the need for support to achieve and maintain good health in order to reduce risk and improve clinical outcome and patient experience.

Now in its tenth year, 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 many 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), Children and Young People’s Diabetes Network (CYPDN), the Diabetes Inpatient Specialist Nurse (DISN) UK Group, Diabetes Specialist Nurse Forum (DSN) UK, Diabetes Research & Wellness Foundation (DRWF), Diabetes UK, JDRF the type 1 diabetes charity, Primary Care Diabetes Society (PCDS), Trend Diabetes, Young Diabetologists and Endocrinologists’ Forum (YDEF) and the United Kingdom Clinical Pharmacy Association (UKCPA) – and, of course, our programme partner Sanofi.

Thanks also go to all of you who have entered this year’s programme, highlighting that despite the extraordinary and unprecedented conditions experienced in 2020, the extraordinary work continues to support those living with diabetes.

Congratulations to all the winners, highly commended, commended and finalist entrants.

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 the first virtual 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. It is important to take this opportunity to recognise your hard work, achievements and we hope you have a successful and enjoyable evening.”

Hugo Fry
Managing Director
Sanofi UK and Ireland

“With the challenges that we have all been facing specially 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.”

Jessamy Baird
General Manager
General Medicines GBU
Sanofi UK and Ireland
SUPPORTERS

- ABCD
  Association of British Clinical Diabetologists

- Diabetes Research & Wellness Foundation

- Diabetes Specialist Nurse Forum UK

- DISN UK GROUP

- Diabetes UK
  KNOW DIABETES. FIGHT DIABETES.

- Children and Young People's National Diabetes Network

- JDRF
  IMPROVING LIVES, CURING TYPE 1 DIABETES.

- PCDS
  Primary Care Diabetes Society

- UK CPA
  CLINICAL PHARMACY ASSOCIATION

- t·r·e·n·d·tM
  DIABETES

- YOUNG DIABETOLOGISTS & ENDOCRINOLOGISTS
  EDUCATION • REPRESENTATION • COMMUNICATION

www.qualityincare.org/diabetes
Judging Leads

Nneka Agbasi
Nurse Advisor for TREND Diabetes and Community Matron, North London

Dr Sabrina Ahmed MBBS, MRCP, nMRCGP(2009), SCE (Endocrinology and Diabetes)
GPwSI in Diabetes at the Gower Street Practice in London

Jessamy Baird
General Manager UK and Ireland, General Medicines GBU Sanofi

Alison Barnes
Research Associate (dietitian) / Diabetes Specialist Dietitian at Newcastle University/ Newcastle Hospitals NHS Foundation Trust

Professor Mike Baxter
National Advisor for Clinical and External Engagement (NACEE), Sanofi

Abigail Burrell-Rann
Senior Community Engagement Officer, JDRF UK

Nicola Butler
Lead pharmacist for Diabetes and Endocrinology, Leeds Teaching Hospitals NHS Trust

Hospitals NHS Trust
Dr Wui Hang Cheung
Consultant Diabetologist, Clinical lead for Inpatient Diabetes Care Service, Norfolk & Norwich University Hospital NHS Foundation Trust

Anne Claydon
Nurse Consultant, Barts Health

Amanda Epps
Lead Diabetes specialist nurse at Medway NHS Foundation, and Founder of the Diabetes Specialist Nurse Forum UK

Katie Greenfield
Research Fellow in psychology, University of Southampton

Dr Clare Hambling
GP and Chair, PCDS

Adele Holcombe
Specialist Diabetes Dietitian / Practitioner and Service Manager for North East Essex Diabetes Service

Dr David Lipscomb
Consultant endocrinologist, East Sussex Healthcare NHS Trust

Anuja Natarjan
Paediatric Endocrinologist

Charles Odiase
Primary Care and Diabetes employed by the Dacorum GP federation under DHPL

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

Becky Reeve
Head of Professional Relations, Primary Care Business Unit, Sanofi UK & Ireland

Dr Fiona Regan
Consultant Paediatrician, Frimley Health NHS Foundation Trust

Miss Lynda Stewart

Dr Clare Whicher
Chair Young Diabetes and Endocrinologists (YDEF)
SUMMARY

In 2017, the Young Adult Service at the Royal Liverpool University Hospital won a QiC award for a significant reduction in non-attendance rates, increased numbers achieving glycaemic targets, reduced diabetes-related emergency admissions and substantial cost savings. This was achieved through restructuring the service pathway, improving communication and engagement with young adults, and establishing a peer-support platform. This submission highlights further changes that have resulted in continued improvements in service-related and clinical outcomes for young adults with diabetes. NICE has highlighted it as an example of best practice and NHS England has used it in defining standards of care for young adults.

METHOD

In Year 1, changes made included: a clinic structure revision, including the introduction of a clearly defined structured pathway for the journey of the YA through the service, joint-multidisciplinary clinics and flexible drop-in sessions, pre-clinic questionnaires for people with diabetes and the incorporation of data download facilities. In order to improve communication, pre-clinic telephone reminders were added to standard letters and texts and patients were encouraged to contact healthcare professionals through emails (9am-5pm). Access to support was extended with the formation of LIVT1D - Liverpool’s first peer-support group for type 1 diabetes. This comprised social media platforms, social get-togethers between members and evening educational sessions supervised by healthcare professionals. In Year 2 and 3, further changes were introduced, including a dedicated, twice-a-year ‘Joint-Young Adult Insulin Pump clinic’ to align care given to young adults on insulin pumps with the well-established protocols of the adult (>25-year-olds) cohort under the ‘Royal Liverpool Insulin Pump Service’. This also served as a platform to discuss challenging cases and clinical conundrums. Primary care colleagues caring for university students were invited to attend young adult diabetes clinics. This reassured them about the care students with T1D received in a specialist service and further strengthened relationships across the healthcare spectrum. FreeStyle Libre education sessions were introduced following the national implementation of flash glucose monitoring prescription. While this was applicable to the entire TID service, significant numbers in the cohort were YA. While in 2020 this is a standard part of the service, in 2017 this was not the norm. A partnership was established between LIVT1D and Everton in the Community, the official charity of Everton Football Club. This laid plans to increase awareness of T1D in the community, provide access to fitness classes and a platform for peer-support meetings. A dedicated diabetes psychologist was employed to manage YA recently transferred from paediatric care or moved onto insulin pump therapy who might be living with diabetes-related distress or other psychological conditions. Letters to university staff and employers were given to YA to hand in at their college/university or workplace to highlight the challenges of living with TID and the importance of allowing them to attend their planned clinic appointments. Once an ethos of regular reflective practice had been established, these annual outcomes were measured: DNA rate and % of clinic cohort attending ≥2 clinics/year; Median HbA1c of clinic; the percentage of patients achieving median HbA1c <58 mmol/mol, as well as the percentage of patients admitted with diabetic ketoacidosis (DKA) and severe hypoglycaemia (SH).
RESULTS
The results from 2015 were compared to those of the three consecutive years following the clinic changes (2016-2018). A significant reduction in the DNA rate was seen from 2015 (47%) to 2018 (21%, p<0.001) and the percentage of people with diabetes attending two or more clinic appointments per year peaked in 2018 (70%) in comparison to 2015 (41%, p<0.001). A steady fall occurred in the median HbA1c for the clinic between 2015 (76mmol/mol) and 2018 (68mmol/mol, p=0.009). Additionally, by 2018, nearly a third of young adults (30%, p<0.001) had achieved a median HbA1c <58mmol/mol compared to 2015 (9.7%). This was above the national median for people with T1D in the same age group (22.7%) and similar to the observed median in the UK for people with T1D across all ages (29.9%) (National Diabetes Audit, 2015-18). Hospital admissions for DKA dropped to 3.3% in 2018 (15% in 2015, p=0.004) and none of the young adults attending the service was admitted with SH (4% in 2015, p<0.001). Feedback from young adults about the clinic and LIVT1D meetings have been encouraging, with satisfaction rates of 85% and 100%, respectively. Furthermore, LIVT1D has expanded steadily over the last three years, with over 250 members supporting each other across Merseyside.

SUSTAINABILITY AND SPREAD
The outcomes achieved by these steady and cost-effective changes were significant and sustained from 2016 to 2018. Three components were central to this. The first was the decision to differentiate ‘expert people with diabetes’ from ‘specialist healthcare professionals’. The experts were the guiding force in co-designing the changes through invaluable feedback to the specialists, who merely implemented and delivered these in the structured pathway. The second was the development of a culture of reflection through regular outcome measurement. This allowed the team to consolidate the positives and improve on the negatives, embedding the belief that, if the wider MDT concentrates on areas of control and worries less about areas beyond control, the positive impact on care delivery can be considerable. The third component was the identification of changes that could be simple and cost-effective to implement. The core principles of this service have been to engage closely with patients and colleagues (paediatric, primary care and wider MDT), management through the use of appropriate language, plus identifying changes that can be implemented with marginal changes to job plans. The changes highlighted have not required substantial additional funding. In fact, aside from funding for peer-support group educational sessions and contribution to clinical psychology sessions, no additional funds were required. Evaluation of the outcomes in 2019 was commenced earlier in 2020 and preliminary results showed continued improvement. This evaluation was halted temporarily by the COVID-19 pandemic.

JUDGES’ COMMENTS:

“The judges loved the Liverpool model. It had outstanding results, clear goals and was really ambitious with good outcomes. It had a fantastic level of challenge in dissemination, which was immense and this is why it has won.”
DISSEMINATION AND SUSTAINABILITY AWARD

Carbs & Cals Books, App & Teaching Resources
by Carbs & Cals / Chello Publishing Limited

SUMMARY

Carbs & Cals specialises in books and apps for diabetes, weight loss, portion control and healthy eating. The method of using thousands of food photos to count carbs and calories is both revolutionary and simple. It has been nationally recognised as the leading carb counting resource for type 1 diabetes for 10 years. Since winning the QiC Award in 2014, Carbs & Cals has published 12 additional books, including resources for type 2, weight loss, gestational and BAME communities. The self-funding project works with partners and research projects to ensure more people can self-manage diabetes and other conditions.

METHOD

Carbs & Cals is a collection of extremely low cost, effective resources, covering a range of conditions (type 1, type 2, GD, weight loss, healthy eating). They are designed to be visual, easy to understand and accessible to a wide range of backgrounds and ages, providing information on nutrition, portion control, self-management and empowerment. They are trusted resources, developed by Registered Dietitians and used by both patients and HCPs.

Over 10 years, researching and producing books has been refined to a process that ensures that each resource fills a gap in health education and self-management. Project co-founder Chris Cheyette (Diabetes Specialist Dietitian) works in the NHS (King’s College Hospital), delivers DAFNE, is a BDA member and regularly speaks at conferences. His interaction with patients and HCPs allows Carbs & Cals to understand the latest evidence and fill gaps in educational resources quickly. The likely demand from organisations, such as BDA, Diabetes UK (DUK) and pharma, is identified before resources are created. Users and HCPs are involved in the planning process, with resources researched by credible experts. The resources are produced efficiently, making use of budget and minimising time to launch. As a small, self-funded operation, project costs are kept low and there are no delays sourcing, or waiting for, funding. Regular freelancers produce the books quickly. All the books are thoroughly checked and tested before printing. Resources are assessed by HCPs and test books are printed and used in clinics. All information meets nationally recognised guidelines, and nutritional information is accurate.
RESULTS

Originally aimed at Type 1 diabetes, resources have been extended to Type 2, gestational (GD), weight loss, healthy eating and, most recently, Type 2 in BAME communities. Books have been developed for other countries, including Portugal (in association with APDP), Germany and the Netherlands. The app now has food databases for the UK, USA, Germany, Austria, Italy and Portugal. Dissemination is ensured through a range of channels, including: working with structured education programmes (e.g. producing 18,000 CARB PORTION LIST booklets for DAFNE); NHS collaborations; partnerships with companies such as Roche, which distributed thousands of free books each year with meters; encouraging HCPs across the country to use books in clinic (e.g. the CARB & CALORIE COUNTER was distributed to every diabetes centre in the UK); DUK supports and sells the Carbs & Cals books; attendance at diabetes conferences; articles and reviews in healthcare magazines and mainstream media; giving talks nationally; providing free content (50 PDFs on the website), as well as an active social media presence for the public and HCPs. The number of books printed rises each year. In 2018, three times as many books were printed compared to 2010 (when the first book was launched), and 50% more than in 2014. The number of Amazon reviews has increased 12-fold since 2014 (from 500 to over 6,000). Free flyers are requested every week across the UK, which demonstrates that the books are being recommended by HCPs in every location. The reach of social media has increased gradually, with the popular Easter Egg post on Facebook reaching 53,000 people organically, with 6,500 engagements and 270 shares. The resources have a loyal fanbase of 18,000 people on the email mailing list, with excellent engagement rates.

SUSTAINABILITY AND SPREAD

Carbs & Cals has gone from strength to strength for 10 years, developing 15 books plus other resources. It is continually improving products, making them as effective as possible. Resources are supported by established knowledge, experience, processes and a team of regular freelancers, enabling development far more quickly than most NHS projects (e.g. SMOOTHIES book took two months to complete, from initial planning to printing). The project founders and managers, Chris Cheyette and Yello Balolia, are committed to the project for the foreseeable future. There is still much scope to use existing content and expand resources to help more people with diabetes in the UK and beyond. The project is financially self-sustaining and generates enough funds to make further resources. The books can be used in clinic, on structured education courses, and by those with diabetes at home. The resources are designed to be simple, accessible and used flexibly in a variety of healthcare settings. Keeping the app updated has been a challenge as the app development company went into liquidation. However, photos have been added to the app. Dissemination is supported by marketing via newsletters, social media, conferences and awards. Resources rank highly on Amazon (e.g. people searching for ‘smoothie book’ will see the SMOOTHIES book at top of search results). There is a programme to repackate content into other resources and support external research. The database is provided to other organisations for research and commercial purposes. Images are shared with HCPs to update patient handouts and presentations. Carbs & Cals information is used on the Know Diabetes website and data have been used to make the DAFNE CARB PORTION LIST. In addition, books have the capacity to be cut down (e.g. WORLD FOODS South Asian version in Urdu). Content has been licensed to publishing companies overseas, resulting in the CARB & CALORIE COUNTER being licensed and translated into Dutch, as well as a German version being produced, with the rights sold to a publishing company in Germany. Furthermore, VERY LOW CALORIE has been translated into German for research trials.

JUDGES’ COMMENTS:

“The judges felt this is really an important and effective resource and admired it in many ways. It is very sustainable and a real game changer in Diabetes. It has become an indispensable tool in diabetes care.”
**MIND AND BODY HEALTHY TOGETHER – EMOTIONAL WELLBEING PROGRAMMES FOR PEOPLE WITH DIABETES**

**Collaboration with IAPT to Improve Diabetes Pathways - Simple Innovation!**

by North East Essex Diabetes Service (NEEDS) / Suffolk GP Federation

**SUMMARY**

The association between diabetes and mental health is well recognised, both widely referenced in the literature, and witnessed first-hand by clinicians in their day-to-day working. North East Essex (NEE) collaborated with the local ‘Health in Mind’/‘Improving Access to Psychological Therapies’ (IAPT) team to improve access, care and outcomes for those living with diabetes in the region. Initially IAPT therapists were invited to diabetes patient education events but this led to development of new clinics, a specific diabetes/well-being course and much more. The main outcomes were improved access, improved psychological well-being scores and better diabetes self-management.

**METHOD**

The initial meeting was used to brainstorm, agree actions and set up ongoing meetings to keep the project on track. It was agreed that NEE diabetes service (NEEDS) clinicians would visit IAPT whole service meetings and deliver ‘round table’ training sessions. Topics covered included: basic what is diabetes/the difference between T1 and T2; daily diabetes routine and understanding medications, plus common issues seen in patients with diabetes (DKA/Hypo/burnout). The IAPT team would update the NEEDS team on new pathways, what they offered, how to prepare patients, ways to encourage patients to attend, plus basic mental health first aid. A ‘managing stress’ workshop provided the team with skills to suggest to diabetic patients. The diabetes therapists would shadow DAFNE, DESMOND and some NEEDS clinics to gain better general diabetes knowledge and gain insight into the patients’ experience. Further, they would be signposted to the Diabetes UK website and resources and discussion with the NEEDS DSN. A dedicated diabetes practitioner worked with the therapist to develop the diabetes and wellbeing course content and structure. Meetings were held between the therapists and a link DSN from NEEDS for ongoing CPD/updates and forward planning. A new mental health nurse (MHN) was recruited and upskilled to work within the NEEDS team to improve MH care. Updates were made to referral paperwork and process. Now, either the NEEDS team directly refers, or patients who mention their diabetes at screening are put on the separate IAPT diabetes pathway. The new pathway includes fast-track appointments and a separate waiting list from ‘general IAPT’, with upskilled practitioners based in a familiar location. Clinics with diabetes practitioners were put in place once the basic upskilling and pathways were ready, about six weeks after the initial meeting. A further pathway was developed, including the new steps of MH practitioner in NEEDS, the wellbeing course and the new clinics.
RESULTS
The project reviewed scores for levels of anxiety, depression and diabetes-specific measures, for diabetic patients in the NEE IAPT Service. Integrating support from NEEDS with the psychological care from the IAPT service broke down psychological barriers for diabetes patients accessing medical care, resulting in improved glycaemic control and reduced psychological stress, ultimately reducing health service costs. Sources of referrals and recovery rates for diabetes patients were reviewed between 1 April 2018 and 31 March 2019. The main sources of referrals were self-referrals, followed by referrals from GPs, Colchester General Hospital and NEEDS. Over 90% of self-referrals were signposted by NEEDS. The number of referrals with diabetes increased from 20 to over 300 in the first year (partly attributed to improved screening questions and form). A total of 64% of diabetes patients had a primary diagnosis of depression and 26% had a primary diagnosis of Generalised Anxiety Disorder (GAD). A reduction was seen in pre and post anxiety and depression scores following psychological intervention, with recovery rates of 65.96% for depression and 68.09% for GAD. For patients who attended a diabetes co-location clinic at step 3 between 7 February 2018 to 17 May 2019, the average reduction for depression was 8.29 and 8.86 for anxiety. A reduction was seen in diabetes-specific measures (Diabetes Distress Scale and/or PAID Scale) for patients who attended the diabetes co-location clinic, highlighting the effectiveness of psychological talking therapies for reducing emotional burden, regimen distress, interpersonal distress, physician distress and diabetes-related emotional distress. In addition, DNA rates reduced, reflecting national evidence suggesting that people are more likely to attend psychological therapies delivered in a familiar location.

SUSTAINABILITY AND SPREAD
This work will continue in order to help IAPT increase access to those with LTCs and help NEEDS continue to improve diabetes outcomes. Treatment is more specific to patients’ individual needs and targeted interventions can be delivered. Sustainability of staff training is easy, as shadowing can be arranged at any time and routine CPD is offered as a shared approach, e.g. an IAPT therapist can attend primary care or specialist team training sessions.

Following Covid-19, IAPT clinical work has reduced to virtual support (phone) for those actively receiving treatment. New referrals are on hold to IAPT but are triaged and supported by the NEEDS MHN. For patients of concern she contacts IAPT to seek the support they need. The MHN has also adapted some of the national MH support tools for NEEDS clinicians to share with patients with early signs of MH issues. This signposting to self-help has also been shared on the NEEDS social media pages and website. The project is sustainable in providing some virtual/video consultation for patients and ongoing training between to two teams takes place virtually. This model is extremely flexible on both sides. Outcomes will be audited later.

JUDGES’ COMMENTS:
“
The NEEDS entry is a fantastic idea and really needed. The judges could see that it could quite easily be transferred. It is a simple solution with huge benefits and is a great collaborative piece of work. A brilliant example of integrated care.”
MIND AND BODY HEALTHY TOGETHER - EMOTIONAL WELLBEING PROGRAMMES FOR PEOPLE WITH DIABETES

Talking Type 1 - Making Diabetes Psychology Accessible for Everyone
by Talking Type 1 (All Wales Diabetes Improvement Group)

SUMMARY
Talking Type 1 Diabetes Burnout is the first guided self-help resource for people who live with type 1 diabetes and have diabetes-specific psychological issues. It was co-produced by a diabetes specialist clinical psychologist and people living with type 1 diabetes around the world. It is available free to patients in Wales with type 1 diabetes. Feedback from diabetes staff has been positive, and there has been significant interest and demand from both services and people living with type 1 diabetes outside Wales. Talking Type 1 Diabetes Burnout aims to meet significant unmet psychological need and lack of adequate staffing.

METHOD
The idea for the Talking Type 1 range was conceived of by a Clinical Psychologist who felt frustrated at the lack of adult diabetes psychology provision, both locally and across the UK. It was hoped that the books would fill gaps in services where diabetes psychology was lacking and give diabetes teams the confidence and tools to support people with lower-level psychological issues. An early draft version of Diabetes Burnout was ‘pitched’ to the clinical lead for diabetes in Wales, who obtained slippage money from the All Wales Diabetes Implementation Group to fund further development, design and printing of the resource. It was developed with colleagues who had previously been involved with the commissioning and development of educational resources for people living with diabetes. Funding for development of subsequent resources has been obtained from the All Wales Diabetes Implementation Group budget. Co-production with people living with Type 1 diabetes has been a key aspect of the resource development, and views of people living with Type 1 diabetes have been sought and used at all stages of the production process. The second title in the Talking Type 1 range is Not OK with Needles?
RESULTS

The resources have been distributed across all seven NHS health boards in Wales and are available to all adults and adolescents living with Type 1 diabetes. Feedback from teams indicates that the resources are being used regularly and are particularly useful in starting and structuring conversations between diabetes nurses and their patients. The initial stocks (3,000 printed copies) of Diabetes Burnout have been used and additional print runs have been organised. All people with diabetes who completed an online evaluation of the range reported that the resources had reduced the impact of the problem (either diabetes burnout or needle phobia) in their lives. This was assessed by asking people to give a percentage score for impact of the problem pre and post reading the resource. There was a statistically significant difference between the problem impact scores noted before reading the resource (M=48.8, SD=22.4) and after reading it (M=26.3, SD=14.8) t(5)=5.49 p<.01.

All people with diabetes who completed an online evaluation reported that the resources had increased their confidence in their ability to manage the problem. Their confidence percentages were noted pre and post reading the resource. There was a statistically significant increase in confidence scores taken prior to reading the resource (M=58.5, SD=20.7) and afterwards (M=81, SD=6.6) t(5)=3.13 p<.05. The survey participants were asked what changes they had instigated as a result of reading the resources. Their responses included: “Reassuring myself that highs and lows are part of my diabetes”; “Exercising regularly again”; “Little steps and being kind to myself”; “Some time out. Trying to accept that it’s okay not to be okay sometimes”; “To stop beating myself up when I get it wrong. To accept this is a normal part of the process. To take time to self-care properly”. While improved diabetes management through reduced HbA1c was not measured as part of the evaluation process, one resource user spontaneously reported that her HbA1c had reduced by 2% (approximately 22 mmol/mol) purely as a result of changes in her thinking and diabetes management instigated by reading the Diabetes Burnout resource.

SUSTAINABILITY AND SPREAD

Annual funding has been secured for three years that will enable the project to continue. Further funds are likely to be forthcoming, particularly as the costs are beginning to be offset by external sales. The first sale to an external agency has been agreed, and talks are in progress with multiple other agencies. A QR code has been embedded in the design of all resources produced from 2020 onwards, to ensure maximum uptake of the online evaluation questionnaire for resource users. The resources are being referenced in national documents across Wales and have been included in national audits as examples of psychological support being used in services. A page has been established on the NHS Wales diabetes Sharepoint website in order to keep diabetes healthcare professionals updated about developments in the range, as well as provide ongoing guidance and support. A Twitter account has been set up to promote the books globally (@TalkingType1), and they have a section on the newly launched UK Diabetes Psychology website, diabetespsychologymatters.com. The lead author has presented at multiple national conferences to launch and promote the range, obtain staff feedback and provide guidance on using the resources with patients. Launch events were filmed and put on YouTube to provide easily accessible training resources for staff. The lead author also delivered training to practice nurses to ensure uptake in primary care.

JUDGES’ COMMENTS:

“Talking Type 1 is an innovative and novel approach and is something that is really needed. It fills a gap within psychological support and had a good range of feedback from different users. It clearly demonstrated the impact of the project.”
SEREN Connect is a comprehensive education programme to address a long-standing gap in service provisions for Young Adults (YA) living with type 1 diabetes (T1D). It helps teams to support every child with diabetes in Wales. The transition from young person to young adult and the difficulties of trying to self-manage health is hard at this notoriously turbulent time. SEREN Connect provides tools for all healthcare professionals (HCPs) to deliver information on age-appropriate topics that directly or indirectly impact the lives of YA living with T1D. It aims to influence and improve services across Wales, via paediatric and adult colleagues.

Early ‘wants’ from developing this project were mixed with ‘needs’ from national guidance and existing good practice to create a programme that could: be co-delivered by both paediatric and adult colleagues; be delivered in a group setting (but also be useful where YA do not attend); be suitable for all YA, irrespective of length of diagnosis; be as inclusive as possible to all YA; create a safe space for YA to discuss T1D from their point of view; include elements of peer support; be replicable in every service across Wales; and feel safe and manageable to deliver for diabetes colleagues. Conversations were held with the SEREN Education Group (All Wales representation of multidisciplinary team of consultants, diabetes specialist nurses, dieticians, a clinical psychologist, parent representatives, and lived experience of diabetes). As SEREN is a paediatric programme, wider representation was needed so a sub-group was formed with extended invitations to adult colleagues and YA living with diabetes to focus on the development of the programme. Some YA who gave initial comments formed a virtual YA feedback panel. They were invited to comment on all resource development. The views and representation of minority groups and communities, including LGBT+, ethnic minorities, religions, and Welsh speaking communities meant that the programme was written to be as inclusive as possible. This led to the creation of various resources published in 2019, including a SEREN Connect Curriculum and facilitator guide front cover with artwork based on YAs’ input, a SEREN Connect A4 box file containing a copy of the curriculum and facilitator guide and all resource cards needed for all four group sessions, plus SEREN Connect booklets suitable for use with young people from Year 9 onwards. These are also given out at SEREN Connect group sessions and/or appropriate for any YA diagnosed with diabetes who does not receive care in paediatrics. The difference between SEREN Connect and existing diabetes education programmes is that it offers additional elements beyond health education that YA need, with the aim of developing self-confidence, encouraging team building and promoting resilience and independence. This is difficult to achieve in a traditional diabetes clinic set-up. It puts the person at the forefront of diabetes care. Having all resources on hand in the delivery box allows flexibility when encouraging uptake of group sessions; they do not need to take place in a hospital setting.
RESULTS
Serena Connect has been designed to be flexible. Elements of the programme can be introduced to YA when they are most needed. This can take the form of one-to-one consultations to discuss topics such as alcohol and/or sex/relationships from Year 9+ (13yrs); group sessions of 16-18-year-olds to build further knowledge with peers guided by HCPs; when a young adult is newly diagnosed and may already be driving/drinking/sexually active at university or working. The programme has enabled paediatric and adult colleagues to work together for the first time, with meetings to discuss reconfiguring existing services to accommodate the delivery of Serena Connect. Some health boards have established a working group for transitional care, with Serena Connect delivery on the agenda at each meeting. YA have been developing a rapport with adult teams before their care transfers to adult services. Serena Connect resources have been taken up in all seven health boards and are being used with YA aged 14-25, and beyond.

SUSTAINABILITY AND SPREAD
There is a commitment in the Diabetes Delivery Plan for NHS Wales’ services to deliver Serena Connect. While there is no updated delivery plan post 2021, it is anticipated that Serena Connect will be included as a recommendation. Since it was launched, every health board has nominated a paediatric and adult lead to coordinate delivery. Beyond delivery to HCPs, Serena Connect has been included in an e-learning module for Swansea University’s MSc Diabetes Practice. Electronic versions of a booklet trialled with YA received positive feedback and these have been circulated to diabetes teams since June 2020. Young people in Wales can access the booklet via the Digibete App (which is free to all families living with diabetes in Wales). A lack of age-appropriate information on T1D and foot care or eye care in Wales resulted in new resources being created as part of the programme. The national podiatry network and Diabetes Eye Screening Wales gave input. Serena Connect is in demand with YA services beyond diabetes clinics, including Primary Care. There has been interest from several trusts in England, including CYPD West Midlands, CYPD South West Network and CYPD Thames Valley, and areas of Somerset, London, the Isle of Wight and Northern Ireland. The programme has been presented at several conferences. In 2020, national discussions have been held regarding taking Serena Connect group sessions online. A virtual session, trialled by a health board in May, was positively received, so the ‘next steps’ will be to enable more options for engagement.

JUDGES’ COMMENTS:

The SEREN Connect project has identified that one of the big problems in paediatric and young people education is that there aren’t any national programmes and lots of people have been trying to develop them without real success. This work has done just that and is also incredibly innovative, with spectacular outcomes.
The Know Diabetes website was created in 2015 to provide information about user group activities. Since 2017, MyWay Digital Health and Dynamic Health Systems have partnered to redesign and extend the Know Diabetes Service, to: support over 300,000 people with diabetes, previous gestational diabetes or non-diabetic hyperglycaemia; encourage sustained behavioural change using personalised proactive communications; promote public awareness of diabetes; provide information to high-risk ethnicity groups; increase access to formal education programmes with a single point of referral, and support self-management. The relaunched service had over 70,000 users in the last three months and positive feedback.

Following consultation with users and clinicians in 2016, a tender process was undertaken in 2017 to expand and improve the Know Diabetes website. Funding limitations meant this consisted of two stages: an upgrade to the website and addition of eLearning (MyWay Digital Health); the wider digital health marketing, patient record access and education booking platform (MyWay and Dynamic Health Systems). Payment of technology providers was linked to completion of work packages. The programme is an innovative initiative, introducing new practices and digital tools into the health system. A Diabetes Digital Team of subject matter experts worked closely with clinicians and patients. Web and campaign content were designed with an eye on clinical content, accessibility and behavioural change best practice. Delivering this in the midst of significant local health system change required considerable flexibility. The team adopted agile methods and tools across the programme to assure maximum responsiveness. A Programme Collaboration Framework was developed to support all planning, delivery and reporting activity, deploying a number of procedures and tools to measure engagement and outcomes, and refine future developments. These included Google analytics to track the total number of web visitors, pages visited, length of visit, bounce rate, geographical location, source of referral, demographic data and more. Cloud-based collaboration tools were used, including Miro, Microsoft Teams, and Teamwork. Campaign automation tracking was used to monitor email delivery, open rate and click-through rate. Satisfaction surveys were used to discover the views of patients receiving email newsletters and campaigns. In addition, topics-of-interest surveys provided greater insights into patients’ preferences.
RESULTS

Currently, data from 350 GP practices is being fed into Know Diabetes. Analytics on initial email campaigns demonstrate that North West London (NWL) patients are engaging with the site and levels of engagement are expected to increase as campaigns extend to all people impacted by diabetes or at risk of T2DM in the region. An accelerator to full operation and evidence that the solution scales was the COVID-19 crisis. The rapid rise in numbers of patients with COVID-19 in March 2020 demonstrated the need to provide clear messaging to people with diabetes, not just about shielding, self-isolation and sick day rules, but also about wellbeing more broadly. A COVID-19 section (https://www.knowdiabetes.org.uk/for-you/Covid-19-staying-healthy/) was created within a week of lockdown, which was shared widely via SMS from GP practices. This included: sick day rules; key messages about optimising diabetes self-care in order to reduce risk of severe COVID-19; how to get/remain active during the pandemic; eating well on a budget; advice on mental wellbeing; COVID-related blogs, as well as signposting to language-specific resources. Current analytics data demonstrate: 800-3,300 user visits per day; over 70,000 users and over 196,000 page-views in the past three months, with over 36,000 visits to the COVID-19 pages and over 8,000 visits to the T2DM prevention page; a 48% open rate and 12.3% click rate on the latest newsletter (industry standards are 35% and 5%, respectively).

Every month there is a meeting with clinicians, patients and other experts in diabetes to review the content of the website and email/SMS campaigns. Examples include engaging with the BME Health forum to implement a new black and minority ethnic (BAME) part of the website, and work with MenCap and learning disability charities to produce easy-read areas and provide blogs from people with diabetes and learning disabilities on the website.

SUSTAINABILITY AND SPREAD

NHSE and CCG funding have been provided to improve diabetes care in NWL, including deployment of the KDS and enhancement of the website as the centrepiece and service access point for all people with, or at risk of, T2DM in NWL. The KDS and its core eLearning Platform have been designed in layers to assure that the service can extend regionally and nationally and can scale appropriately. The technology partners operate UK-wide and collaboration with other London partners assures interoperability. Access to the One London LHCRE (Local Health and Care Record Exemplars) Discovery Data Service enables ease of service extension into all five London Sustainability and Transformation Plans (STPs), and beyond. KDS is a demonstrator for the One London LHCRE programme, focused on delivering long-term interoperability between healthcare systems. A recent presentation at the NWL Digital Strategy Board was well received, with clinicians, commissioners and digital teams impressed with the capabilities and architecture of the system. KDS is now part of the NWL Recovery Plan and the key capabilities of the system are written into the current NWL Digital Strategy Roadmap for FY20-21. A barrier to building a sustainable service has been the impact of the NWL financial deficit. However, the team has worked with the STP leadership to ensure ongoing service funding. The capabilities are seen as core requirements for future support for patients with other long-term conditions. An evaluation partnership, funded by the HDRUK (Health Data Research Hub for Real World Evidence) NWL Discover-NOW programme, is being used to further refine the service. Core KPIs and associated metrics are negotiated with NHSE and the NWL STP leadership.

JUDGES’ COMMENTS:

“The Know Diabetes Service was commendad for its digital innovation in a very challenging area. The project adapted to reflect the COVID-19 situation and was very comprehensive, involving patient user groups.”
SUMMARY

In the 2014-15 National Paediatric Diabetes Audit, the unit was one of the top 10 in the UK, with 38.4% of patients achieving an HbA1c <58 mmol/mol (national average = 22.0%) and a mean HbA1c for the clinic population of 62.8 mmol/mol (national average = 70.6 mmol/mol). However, benchmarking against 2016-17 data showed that outcomes were deteriorating when those nationally were improving. An application was made to join the Royal College of Paediatrics and Child Health National Diabetes Quality Improvement Initiative Pilot to bring about changes. Outcomes for newly diagnosed patients in the two years since compare favourably to preceding years and other paediatric units.

METHOD

The unit was selected to participate in the RCPCH QI Initiative Pilot project. This involved the whole team (including administrators, nurses, doctors, dieticians and a psychologist) exploring methodology and techniques to help drive and sustain change over a period of two weekends and two weekdays. As a result, a range of QI initiatives were implemented. The first of these was carbohydrate counting from diagnosis. All patients started from their first meal after admission, with no fixed insulin doses used. All 48 members of ward nursing and ancillary staff were trained by the team to support carbohydrate counting out of hours.

The second initiative was microteaching. A bite-sized teaching topic was chosen by the patient/family from a series of 30 topics (developed from a patient survey), with discussion facilitated by an educator in the waiting room before each clinic appointment. Furthermore, team targets were set to ensure the whole team gave the same advice and inconsistency was eliminated e.g. for blood glucose levels pre and post meal, at bedtime etc. The final initiative was to encourage families to use Diasend downloading at home. Families that took an active role in interpreting their own data enhanced self-management skills. This approach was also intended to help lead into the next project: telephone clinics. The agreed QI aim is to achieve an HbA1c of 48 mmol/mol at three and 12 months from diagnosis. The progress of each of these projects is continually monitored with selected metrics displayed at fortnightly team meetings on run charts.
RESULTS

In the two years between going 'live' with carbohydrate counting from diagnosis (December 2017 to December 2019), 51 children with newly diagnosed Type 1 Diabetes were admitted. In order to maintain a tight focus on blood glucose control, run charts monitor average glucose at seven, and 30, days post diagnosis, and HbA1c at three, six, and 12 months post diagnosis. In the year prior to the QI programme, average blood glucose was 12.6 mmol at seven days and 7.5 mmol at 30 days. This has now fallen to 10.0 mmol and 6.6 mmol, respectively. The number of blood tests patients undertake has increased from 7.2 to 9.0 tests daily. Mean HbA1c at three months has fallen from 51.2 mmol/mol to 46.8 mmol/mol and, at six months, from 54.9 mmol/mol to 50.1 mmol/mol. At 12 months post diagnosis 45% of the newly diagnosed QI cohort of patients have an HbA1c in the normal range for a non-diabetic child [<48 mmol/mol]. The median HbA1c for the group is 50 mmol/mol.

While the initial focus was on new patients, the impact on the control of these patients and the ripple effect of agreed targets and microteaching on the broader clinic population has been significant. The most recent HbA1c data from the 2018-19 NPDA report suggest that 50% of all patients now achieve an HbA1c <58 mmol/mol, compared to the nadir of 28.6%, and 18.6% achieve an HbA1c <48mmol/mol. This compares to an average of 34.1% <58 mmol/mol and 9.5% <48 mmol/mol for the other 20 paediatric centres in Yorkshire and Humber. The clinic median is now 57.3% and the clinic mean HbA1c has fallen from 64.5 to 59.0 mmol/mol.

SUSTAINABILITY AND SPREAD

QI is now an integral part of care delivery and outcomes are evaluated continuously by collecting metrics and examining the data. More than two years on the team still meets every two weeks (albeit virtually at the moment). The success of the initiative has been shared within the organisation via the Hospital Communications Team and presentations to the Trust Board, Division of Medicine, Clinical Summit, Hospital Grand Round and, on request, to other clinical teams seeking inspiration and motivation to embrace QI methodology. The Director of Nursing has ensured that all children and young people are admitted to a single in-patient ward, where staff are now proud to call themselves ‘The Diabetes Ward’ and have embraced being upskilled in Diabetes care by members of the Diabetes Team, in order to facilitate and support the team's QI work. The results have been shared at local, regional, national and international diabetes and QI meetings. In addition, a plenary talk was given to the 2019 British Society of Paediatric Endocrinology and Diabetes meeting. The team champion has been invited to be the Diabetes Network QI Lead and will support colleagues across Yorkshire and Humber as they embark on their QI journeys. They will advise on projects and the five-year national development plan. Having participated in the pilot, the team now helps others across the country as they join the collaborative. The team champion is now an RCPCH QI Trainer. The support of the RCPCH Quality Programme will lend uniformity of approach and quality assurance to the work being done nationally.

Perhaps the biggest challenge has been maintaining team enthusiasm and commitment when there are conflicting demands on time, but the continual appraisal of data is compelling and the NPDA data serve as an excellent benchmark performance against other teams nationally. While QI is not the only driver of improved outcomes, participation in this initiative provided the impetus to embrace the need for change and be prepared to be brave and fail fast.

JUDGES’ COMMENTS:

“The Sheffield Children’s NHS FT showed real innovation and resourcefulness in bringing the team together. They had a great team ethos and achieved really good, clear, measurable outcomes. The judges were impressed with the comprehensive quality improvement work and felt it was something that could be adapted by adult diabetes teams as well.”
SUMMARY

The 2016 National Diabetes Inpatient Audit (NaDIA) identified a number of management, clinical and patient safety issues resulting in harm. A Diabetes Inpatient Nurse Team quality improvement project was initiated to improve quality and safety for adult diabetes inpatient care, focusing on key issues. The team worked across organisational boundaries, systems and teams, delivering significant improvements to diabetes inpatient care and safety. Substantial funding has been secured for the team to continue to improve and drive diabetes inpatient care and safety.

METHOD

The vision was to improve diabetes inpatient care and safety within the Royal Cornwall Hospital (RCH). The Lead Diabetes Specialist Nurse (DSN) worked with Kernow CCG, RCH and Cornwall Foundation Trust to identify specific goals and milestones based on the shortfalls within the NaDIA benchmark. A 12-month initial timeline was established, with the aim of identifying four areas with the highest patient safety issues. The patient safety quality improvement outcome objectives were: a 10% reduction in medication/insulin/prescribing errors; a 10% increase in the numbers of patients self-managing in hospital; a 10% improvement in the management of hypoglycaemia; ward-based diabetes education for staff; a reduction in length of stay of half a day, plus patient friends and family tests. The Diabetes In-Patient Service (DISN) team developed and reviewed electronic patient reporting systems in collaboration with the RCH Electronic Prescribing team (EPMA). A daily report listed all the diabetes inpatients and their prescribed medications. A range of prescribing and administration errors were identified and highlighted each day for each individual patient on the daily reports. The EPMA team produced a monthly report of the numbers of patients self-injecting their insulin. Furthermore, a daily blood glucose report was set up. This was developed from the Trust connective blood glucose monitoring system in collaboration with the point of care team and the meter company. It generated a daily report of all episodes of hypoglycaemia < 4 mmol/l and hyperglycaemia > 15 mmol/l, identifying the high-risk patient groups. The team also undertook an initial baseline audit to identify four wards with the most elevated incidents of medication/insulin prescribing/management errors/episodes of hypoglycaemia/self-monitoring. These wards were focused on for a minimum of six months.
RESULTS

The DISN team actioned a range of measures. First there was an initial safety brief on all the project wards. The ward managers had to be engaged from the outset as incident reporting was necessary to inform the ward team of the themes and to identify learning needs. Daily clinical patient reviews were undertaken, covering all the safety factors on the project wards. These were identified by review of the daily report and blood glucose alerts, and direct referrals. Education and training were ‘bitesize’ and focused on four topic areas initially: types of diabetes, hypoglycaemia, medications and insulin. As the project expanded, further topics and longer sessions were added, such as pre-assessment and the management of diabetes during surgery. At first, education was for nursing staff, but grew to encompass medical staff and allied HCPs (pharmacists, medical/nursing students, pre-registration pharmacy students and the Trust’s non-medical prescribing group). Evening education sessions away from the ward were provided and a variety of visual teaching aids/games were developed. These included fact sheets, medication body puzzles, diabetes timelines and diabetes safety flash cards. Staff were supported to make changes in situ through ward-based thematic structured education, on-the-spot learning, case discussion and making prescribing decisions and changes. Daily data collection from the project wards was input onto a central data base. Ward-based pharmacists helped with the daily report and promotion of self-management in hospital. In addition, there was a system of incident reporting and review, and patient satisfaction surveys were carried out. A plan-do-study-act (PDSA) approach facilitated changes to working practice throughout the project. These measures resulted in a reduction in prescribing errors of 72%, a reduction in administrative errors of 99%, an increase in self-management in hospital of 65%, as well as a reduction in hypoglycaemic events of 77%. A hypoglycaemia care action label, that had been introduced in response to a clinical incident prior to the project’s initiation, was rolled out to the project wards. It demonstrated a sustained improvement in the treatment and documentation of hypoglycaemia and has been implemented across the Trust. A further finding was that length of hospital stay reduced from 5.6 in 2015-16 to 5.2 in 2018-19.

SUSTAINABILITY AND SPREAD

This approach facilitates patient care across NHS boundaries, as well as integration between disciplines and organisations, and is a sustainable plan. It overcomes some of the traditional barriers to patient care, flow and patient follow up. The DISN team changed working practices significantly to encompass technological approaches to the planning and management of inpatient diabetes care, by identifying and prioritising patients based on clinical safety factors, going beyond general referrals and follow-ups. Changes to working practice within the team are sustainable. These include: proactive patient identification; proactive caseload management; virtual reviews; daily EPMA reports and alerts, and bitesize timely education and teaching. The DISN team reviewed every inpatient with diabetes in the hospital, face to face or remotely during the project. Educational resources were funded from educational budgets and are reusable and adaptable. The project, and transferable working practices, like the daily EPMA reports and hypoglycaemia care label, have been shared regionally via the NHSE cardiovascular diabetes network and used in other areas. The provision of funding for a DISN position to continue this work demonstrates the viability of the project.

JUDGES’ COMMENTS:

“This project really impressed the judges with the results they achieved. The demonstrated good integrated working with measurable outcomes that showed they had genuinely made a huge difference. Educating ward staff is critical and this project achieved all it set out to.”
TYPE 1 SPECIALIST SERVICE

Growing Up, Moving On – Supporting Young People Leaving Paediatric Services
by Cwm Taf Morgannwg University Health Board

SUMMARY

Prince Charles Hospital in Wales is in an area of marked social deprivation, but the paediatric unit has recorded some of the best outcomes on the National Paediatric Diabetes Audit for England and Wales for several years. Following critical feedback from young people moving to adult services, the paediatric team engaged their colleagues in adult services to address issues that led to disengagement and deterioration in outcomes. This process began in 2016 and, within a year, NHS Wales hailed the model as an example of good practice. Evaluation and changes were accomplished through reconfiguration of existing work patterns and without additional costs.

METHOD

Feedback from questionnaires sent to 57YP who had moved into adult services in the preceding five years, and their parents, recorded an overwhelmingly negative opinion about services. The survey also asked respondents what they would like from the service. The adult and paediatric diabetes teams worked with the NHS Wales Transitional Care Co-ordinator to review the issues with the service structure and identify changes that could be made. In January 2017, the first cohort of patients used the new-style clinics. The patients were all aged 16 and were seen in the paediatric centre. The clinic was led by the PDSN with an adult DSN and paediatric dietitian in attendance. The patients were invited to three nurse-led sessions throughout the year in which they turned 16. Leading up to their 17th birthdays, they received invitations to attend a clinic with the consultants, led by a paediatrician but with the adult consultant present, alongside the adult DSN, PDSN and adult dietitian. At age 17 the patients were invited to attend two further nurse-led clinics held in the adult diabetes centre, led by the DSN with the PDSN and adult dietitian present.

At age 18, the patients attended a second consultant-led clinic, this time led by the adult consultant, with the paediatrician, adult DSN, PDSN and adult dietitian present. At that point, pending agreement within the team and with the young person, the patient was handed over to adult services. Important elements of the new approach include: educatingYP about what will happen next; providing contact details for adult services; outlining available Structured Education options, as well as giving families information about the service changes, including a ‘who’s who’. The location of the clinics was also changed, with the DSN and dietitian from adult services moving their clinics to community hospitals in between consultant-led appointments. This made attendance easier for patients. The geographical composition of the region can make it difficult to travel from one valley to another, especially if a person relies on public transport. Bringing the team out of the District General Hospital into community hospitals made services much more accessible.

Pre-existing clinics were converted into transition clinics, so there was no increase in workload for most of the nurses and dietitians. The number of clinics attended by the DSN in adult services has risen, but this has been compensated for by reconfiguring other work. The change in clinic structure has also meant a small increase in consultant time, with an additional four sessions needed per year.
RESULTS

Over 25% of respondents to the survey, who had moved to adult services prior to the changes, indicated that they had not attended a follow-up appointment in the adult services clinic. Of the patient cohort who completed the two-year programme, there was 74% attendance at all transition clinic appointments and all patients attended at least three appointments within the two years. Survey responses from the first cohort of young people to move through the new process indicate substantial improvements in preparedness and patient contentment with the process.

SUSTAINABILITY AND SPREAD

The changes made to the service have been highlighted as good practice in Wales, with early changes recognised in the All Wales Standard document. This publication was highly commended at the QCIC awards 2019. The good practice standard set by Prince Charles Hospital is now being replicated in other areas of Wales. Units in in both North and South Wales are adopting similar models of care for this age group and creating their own meet-the-team boards. Ideas from the team helped inspire some of the content of Diabetes UK’s ‘How to: Improve transition for young people with diabetes’, published in 2017, and its ‘diabetes monthly hacks’. In 2018, the team presented a poster at the Cwm Taf Morgannwg Research and Development Conference. In January 2019, the team presented the service changes at the RCPCH NPDA conference.

JUDGES’ COMMENTS:

"The judges thought this entry was the ideal of what should be happening within our industry. It started small and grew, improving and demonstrating positive impacts in the diagnosis and management of type 1 diabetes. There is no doubt that they have achieved this in spades!"
TYPE 1 SPECIALIST SERVICE

Newham Diabetes Transformation Programme – Supporting Young People (16-25 years) with Type 1 Diabetes

by WEL CCGs

SUMMARY

Newham, east London, has a young population (>40% under 25 years) with significant deprivation and social inequality. Recent migration from Somalia, Eastern Europe and Africa has seen a rising prevalence of type 1 diabetes (T1D). NHS England funded a Diabetes Transformation Programme which has: determined the number of young people with T1D, including those ‘lost to follow-up’; identified and addressed gaps in service, particularly mental health needs, education and support for A&E attenders; developed a Youth Worker role; increased patient engagement through a Peer Support programme; redesigned referral pathways across primary and secondary care, and used online consultations for more flexible care.

METHOD

A number of workstreams were implemented to complement each other. First, a Clinical Effectiveness Group (CEG) was set up and a clinical dashboard was developed to establish baseline and measure outcomes throughout the project. It was reviewed quarterly. The primary care audit included: primary care engagement championed by the GP diabetes clinical lead; data extracted from all practices to identify key metrics for initial support; development of a practice audit tool to support virtual reviews of primary care records by the DSN and a monthly reporting tool for clinicians to monitor progress and track changes.

A clinical facilitator initially visited practices. The DSN-led, practice-based audit included: virtual case record reviews, a review of T1D coding to ensure accuracy, access to specialist care pathways, including structured education and the provision of detailed feedback to practices with support to identify patients who needed re-engagement. A review of hospital A&E attendance was conducted. Over three months’ admissions, 9 out of 24 patients attending with T1D were between 16 and 25 years; most were not attending specialist clinics. Over 12 months, 18 of 65 patients attending A&E were between 18 and 25 years. The DSN reviewed the records of all patients attending A&E for: previous admissions, discharge for DNA, or underlying mental health problems. Patients were contacted by the DSN post-discharge to jointly agree a follow-up plan and a review by the Consultant Diabetes Psychiatrist was suggested. In the areas of administration and HCP training, a referral pathway was completed, a booking system was produced to avoid duplication of visits, contact details were recorded on the diabetes database (DIAMOND) and T1D was coded on all patients on the Trust Cerner EPR. All new nursing and dietitian staff had DAFNE training. In parallel with these steps, the multidisciplinary team (MDT) was formally established, with a DSN, consultant diabetologist, dietician, mental health colleagues and youth worker. Social media platforms were set up with input from service users and communications teams at Barts Health and Newham CCG. Four awareness events were arranged, with local partners and Diabetes UK, to inform the local community and improve uptake of services.
RESULTS

The results show the impact of the programme up to February 2020. The numbers of T1D aged >12 achieving the 3TT (Cholesterol/HbA1c & BP) rose from 24.6% (April 2018) to 25.1% (April 2019) and then to 31.69% (January 2020). Primary care records showed a reduction in dual coding of 41%. Seven out of 17 patients attending A&E in 2019 were referred to the Consultant Psychiatrist, six were assessed and receiving regular review. Data analysis showed a reduction in admission and LOS in this cohort. A total of 10 patients completed DAFNE. Of these, eight had post-course Hba1c and all reduced Hba1c levels at 6-12 months post-DAFNE. The average Hba1c reduction was 12 mmol/mol (range 3-33 mmol/mol). The average Hba1c pre-DAFNE was 73 mmol/mol and 61 mmol/mol post-DAFNE. Flexible outpatient appointments (telephone, emails, evening clinics and video follow-up) helped reduce DNA. Video follow-up reduced DNA from 33% to 11%. Use of email reduced numbers of patients ‘lost’ to follow-up. Patients highlighted ease of access, convenience and changing dynamics of clinician-patient interaction. The number of patients initiated on Freestyle Libre during the period was 56 (23 in 2018 and 33 in 2019), with the total number of adults initiated 235. The baseline Hba1c range was 24-142mmol/mol and the median 83 mmol/mol. The average Hba1c now is 78 mmol/mol and the median value is 75 mmol/mol. There was an average 9mmol/l Hba1c reduction among 16 patients having regular dietitian input, representing a 12% average reduction over one year. The closed Facebook group has almost 100 members and rising. Regular video chats are hosted by patients for peer support. The youth worker makes about 10 successful contacts each week, helping patients with CV writing, job applications, disability benefit claims and so on, in addition to supporting transition, arranging clinic appointments and peer networking.

SUSTAINABILITY AND SPREAD

Children and Young People (CYP) care is a priority for NEL STP and has been identified as an area for transformation. Eight ambitions are to: strengthen CYP engagement with local authority, voluntary agencies and parents/carers, focusing on what matters to them; work to further empower CYP; monitor and collectively challenge activity across the system; retain a focus on the most vulnerable communities and challenge health inequalities; strengthen shared learning across partnership; address the challenges of digital/virtual consultations and continue to invest in, and grow, a workforce that meets the needs of CYP and families across NEL. Newham CCG plans to deliver these ambitions by strengthening partnership working with the local authority, public health, voluntary sector and provider organisations. To this end, young people’s care has been named as one of two priorities by Barts’ Medicine and Children’s Board and has executive-level support. The funding for this programme has been extended until 2023. The findings suggest that a similar model could be rolled out in other demographics and geographic areas, for patients with other chronic diseases. Dissemination has been achieved through a presentation at the RCPCH (Royal College of Paediatric Child Health) Adolescence: Coming of Age conference in September 2019 and a paper published in BMJ Open. The team has led the use of online consultations and supports national rollout.

JUDGES’ COMMENTS:

“Although this project is still in its early stages, it stood out to the judges for the amazing job, demonstrating a positive impact. The vital mental health support and the flexible service with the MDT was very impressive. The judges look forward to seeing this project develop.”
**TYPE 1 SPECIALIST SERVICE**

**Hypo Dino – Created by Children to Inspire Others**

by Children and Young People’s Wales Diabetes Network

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**SUMMARY**

Hypo Dino is a picture book created by a girl of eight called Katie, who has type 1 diabetes. The hero of the story is Tim Dinosaurs, a dinosaur with type 1 diabetes and a spy protecting the world from an evil villain. Tim experiences hypos and has to learn to manage his diabetes in order to save the world. Katie brought the book to a clinic appointment at Morriston Hospital (Swansea) and the Children and Young People’s Wales Diabetes Network worked with a graphic designer to recreate it as a printed resource that is distributed to families across Wales through paediatric diabetes units.

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**METHOD**

Hypo Dino was entirely the creation of Katie and her friend Ava. The Network decided to publish it after recognising that it could be used as a means of support for families across Wales. After the publication decision was made, the design, print and distribution of the Hypo Dino book was project managed by the Network Manager. The team ensured that Katie and her parents gave full consent for every decision taken. They were careful to ensure that Katie did not feel pressured, overwhelmed or stressed by any of the process. The first meeting was facilitated by the psychologist in the team who ensured Katie was satisfied with the decisions that were being made. The Network licensed the publication from the creators, Katia and Ava, ensuring that the intellectual property rights remained with them. The Network commissioned Matthew Pugh, a graphic designer based in Swansea, who had worked for the Network before. Matthew met with Katie and Ava and their families and resolved some style and design issues so that the picture book could be printed in a normal way. This included redrawing some of the artwork and correcting some spelling. The narrative structure was retained entirely. The Network Manager suggested the inclusion of some questions for readers at the end, which the creators approved. The book was printed and officially launched in November 2019, nine months after the initial meeting with the Network Manager. Quantities of the book were distributed to teams around Wales, who were encouraged to give it to all families attending clinics where the child was aged between six and ten. The initial print run was exhausted by January 2020 and a second print run organised, this time in a bilingual format featuring a Welsh translation of the story. This was distributed direct to paediatric units in April 2020.
RESULTS
The project was completed in a timely and effective manner, with resources distributed to all teams in Wales to ensure maximum availability of the resource. Staff fed back that Hypo Dino has helped them to have conversations with children and parents about hypos, reducing anxiety, and normalising diabetes as part of life. Healthcare professionals reported that they found it a helpful, friendly, unthreatening resource. It has been recognised by the All-Wales Patient Reference Group and the Diabetes UK Cymru Wales Advisory Council as an example of excellent engagement by a healthcare organisation working with people with diabetes. The Network has also been commended by the All-Wales Diabetes Implementation Group and the National Service Advisory Group for Diabetes.

SUSTAINABILITY AND SPREAD
A second print run of Hypo Dino has been budgeted and paid for, and this should provide enough copies to supply the target audience in Wales for at least three years. Hypo Dino can be licensed for use in any territories and one of the regional CYP Diabetes Network managers in England has indicated an interest in publishing this book in partnership with a grant-making body.

JUDGES’ COMMENTS:
“This is a beautiful piece of work and deserves recognition. It is a lovely project with a great story. The fact that the book was written and illustrated by children, but still had a very helpful and serious message within it was impressive. Very inspiring.”
SUMMARY

It was felt that writing a ‘note to self’ on a postcard could help motivate the young adult diabetes clinic population (15-23-year-olds) to look after their own diabetes. The postcards used initially were replaced by more appropriate and cheaper cards designed by the Diabetes Specialist Nurse. The postcards were assessed for suitability in different settings. A questionnaire for service users and healthcare professionals found the postcards were well-liked by young people with diabetes: 83% would ‘recommend’ or ‘highly recommend’ using them and 87% felt more engaged with their diabetes team between clinic visits; 74% felt more motivated to manage their own diabetes.

METHOD

Initially, the DSN bought a box of 100 ‘off the shelf’ Ladybird book cover postcards to test with the young people. However, they thought the postcard selection was dated and more for a generation who remembered the original books. Next, she designed some Inspirational Postcards using free pictures from the internet. She also contacted a local design and print company for ideas. In total, 20 designs were shown to service users. The 10 most popular were selected and 100 of each design were printed. Permission was given to use an audit design tool from another department in the Trust, which was changed to suit this project. It was agreed not to focus on the clinical measures of HbA1c and blood glucose control, as the scheme was trying to help young people to help themselves between clinic visits. They chose what to write on their postcards, so sometimes the things written had no direct link with their diabetes. The audit questionnaire was reviewed by service users and work colleagues in Poole only. In the pilot audit, questionnaires were posted to individuals with a self-addressed envelope to post them back, each with a brief note explaining why they were being asked to assess the Ladybird postcards. A total of 10 audit tools were sent out and three were returned. The audit tool was not changed for the inspirational postcards. The tool needed to be quick to complete and to fit on an A5-size piece of paper. A total of five questions would be used, as service users felt any more would be too long. Following this review, two audit tools were created, based on the same design, but with slightly different questions. One was for people with diabetes and the other was for healthcare professionals (HCPs) to complete. Instructions were posted or emailed so the HCP knew the timeline for the audit and how the postcards had been used in Poole. The idea was for those people with diabetes, who wanted to join in with the idea, to choose a postcard, write something positive about themselves, then a ‘note to self’, and then finish off with another positive comment. Following this, everyone was asked to choose a smiley face sticker and place it on their card instead of a stamp. The young person and the HCP both signed the card. It was kept by the diabetes team for two weeks and then posted to them via hospital postal services, in an envelope to maintain confidentiality. Posting this way maximised space for the young person to write their note and ensured that they were accepted through hospital posting procedures. An audit form was sent with the postcards and a quick reminder note to please complete the audit tool and post it back in the stamped, self-addressed envelope to their diabetes nurse. The audit forms were assessed from three different centres.
RESULTS
The inspirational postcards were used by 120 people with diabetes and 62 returned their survey form. Of these 62, 52 (83%) said they would recommend or highly recommend using the postcards; 54 (87%) felt more engaged with their diabetes team and 53 (87%) were satisfied or very satisfied to receive their postcard; 46 (74%) felt more motivated to engage with their own diabetes. A total of 43 people (69%) reported that they were satisfied or very satisfied with the postcard selection. The HCP audit generated nine replies from three sites. All nine (100%) said they would recommend or highly recommend the idea of Inspirational Postcards for use with their patients with diabetes; eight (89%) said they agreed or strongly agreed that the postcard scheme allowed them to feel more engaged with their patients after they left clinic; eight (89%) felt positive or very positive about using the postcard support scheme in the future; seven (78%) felt sure or very sure the Inspirational Postcards could remind a person with diabetes to stay motivated with their diabetes and eight (89%) would recommend or highly recommend the postcard scheme to other HCPs.

SUSTAINABILITY AND SPREAD
The original idea and postcards were offered to other Tomorrow’s Leader participants and Wessex Change Lab to see if they worked in their own areas. These were programmes that the Poole YPDS team was working with at the same time. They were also shared with adult and paediatric colleagues in other organisations in Dorset that were working together on a county-wide Diabetes Transition project. The DSN gave postcards to local specialist nurses in the Trust to use with their own patient cohorts. She also met with the Innovation Team to see if the original postcards could be used locally and funded by either the Poole Hospital Charity or a local business by engaging with the local Chambers of Commerce. This work was hampered by COVID-19, but discussions are ongoing. The project has stretched beyond Dorset; the medical director of a major insulin production company agreed to use the idea for diabetes teams across the UK as the audit results were so positive and the idea is simple and effective. Discussions are also underway regarding adding the Inspirational Postcard designs to the DigiBete website and a local paediatric epilepsy nurse wants to share the idea with the Roald Dahl Charity. The YPDS DSN has also been invited to speak at the virtual Abracadabra Nursing Conference in 2020.

JUDGES’ COMMENTS:

“The judges liked this “out of the box” idea. They asked for feedback and then acted on it, evolving the programme. It was innovative and the strong patient feedback showed clear patient engagement.”
DIABETES EDUCATION PROGRAMMES – HEALTHCARE PROFESSIONALS

Insulin Education for All: A Pop Up Online Resource
by Faculty of Medicine, University of Southampton

SUMMARY

The free online course ‘Understanding Insulin’ was developed to benefit insulin users worldwide. There was a need to improve insulin knowledge among healthcare professionals (HCPs), people with diabetes and their carers. Insulin-related errors are common both in the UK and internationally, increasing the risk of adverse complications and poor health outcomes. In the National Diabetes Audit, 49% of patients on insulin had experienced an insulin-related error. Many HCPs across the healthcare professions are not competent with using and managing insulin. There are also gaps in insulin knowledge for people with diabetes and their carers.

METHOD

A Massive Open Online Course (MOOC) development proposal was submitted to the University and approved. Development comprised a content discovery stage to evaluate what should be included to provide clear and comprehensive education. This involved broad discussions and in-depth mapping of content. The design of content structure, access (navigation) and style were planned to ensure good usability and effective learning. Interactive, multimedia enhanced content was generated, including storytelling via characterised comic book graphics, videos, diagrams, quizzes and articles. Links to external resources were identified. Beta-testing by colleagues and medical students resulted in improvements. The delivery team then identified and trained mentors, organised MOOC content reviews and oversaw improvements to the content and design features.
A four-week, free MOOC was delivered via the FutureLearn educational platform. It now runs twice a year, for HCPs as well as for people with diabetes and their carers. It covers physiology, clinical applications of insulin, pharmacology of preparations and practical considerations and has had a global uptake. A variety of innovative learning design strategies engage learners of all levels and facilitate active learning. Medical student mentors encourage appropriate discussion and peer learning. A total of 8,882 people enrolled in the MOOC during the four runs analysed. Learners were categorised into two groups: HCPs (54%) and social learners (learning for personal or casual purposes, including people with diabetes and carers). The HCPs were multidisciplinary, both between and within their professions, including 63% nurses, 14% doctors, and 22% allied HCP workers. There was a broad spread of ages (13% were 18-25 years old, 34% were 26-45, 38% were 46-65, and 17% were over 65). Approximately two-thirds of learners were female. The MOOC was undertaken by learners around the globe from 163 countries. The top countries for learners were the UK (49%), Australia (5%) and the US (4%). However, there were a number of learners from under-resourced countries, such as Pakistan, Nigeria, Ethiopia, Somalia, Afghanistan, and Myanmar, where training/learning opportunities could be less prevalent and accessible. More than half of the learners completed at least one step of the course per week, which suggests that they remained engaged. A fifth of users completed the entire course. This completion rate is high in comparison with the average completion rate of MOOC, which is below 7%. After the course, learners were asked how confident they were in applying knowledge taught in the course. A total of 78% were ‘very confident’, 19% ‘a little confident’ and below 1% were ‘not confident’. This suggests that the MOOC has improved confidence in HCPs. A total of 96% agreed that they had learned new skills from the course, 95% agreed that the course had positively impacted their work, and 97% agreed that they had subsequently improved their practice. Some gained new knowledge and for others it was an opportunity to revise knowledge. Learners with both type 1 and type 2 diabetes on insulin, those anticipating a move to insulin in the future and those supporting/caring for individuals with diabetes reported benefits from taking the MOOC, including improved confidence in applying their knowledge and sharing it with other people.

To ensure the wider sustainability of the MOOC, it has been used by the University of Southampton’s HCP students, both through the MSc Diabetes Best Practice programme and by undergraduate medical students, as well as by students taking other programmes offered at the University. The University plans to continue offering it. Content reviews will be facilitated by the MOOC delivery team, including a Consultant Diabetologist, to ensure it remains current. It is hoped that this MOOC can be adopted more broadly in the NHS and the developers believe it would be well received, especially as it is a digital resource, presented to maximise online learning appeal, which has great benefits in the current climate. The Faculty of Medicine, University of Southampton, is currently developing other MOOCs in different healthcare areas. The development process for this MOOC and the feedback from learners have played, and are playing, a critical role in initiating and shaping new healthcare MOOC development.

**JUDGES’ COMMENTS:**

“This initiative is a truly innovative approach that both bridges a gap in insulin education and can be widely disseminated across the NHS. The fact that this is a free resource that can be used internationally demonstrates the far-reaching effect of this entry. Not only was it innovative, this entry was cost-effective, sustainable and flexible.”
Trainee representatives, training programme directors and the specialist training committee set out to establish a world-class diabetes and endocrinology training programme in the Health Education West Midlands Region. The methods are replicable nationally and internationally to facilitate high quality, cost-effective specialty training. Mechanisms used include: curriculum mapping of training days to ensure full content coverage; defining and standardising training representatives’ roles and responsibilities; digitising processes around training day and administration; innovative education approaches, including simulation; additional educational opportunities to promote holistic training and a COVID-19 responsive approach to training and learning, tracking trainee opportunity.

D&E training within the HEWM region incorporates training in 12 hospital sites across a wide geographic area. There are currently 32 trainees. Typically, between four and seven trainees start the programme annually. The historical structure of training comprised six training days each year, with trainees expected to attend four. Training days were organised by two regional training representatives. Consultants were invited to chair sessions and asked to nominate a D&E theme of interest. It was felt that there was significant potential to innovate and improve education delivery, building on these foundations. Different approaches were taken, including: curriculum mapping of training days to ensure full content coverage; training representatives with clearly-defined roles in organising the training days; digitising the processes around training days and administration; implementation of innovative education approaches, including simulation, plus incorporating additional educational opportunities to promote holistic training. The central methodological approach was to ensure truly trainee-led innovation at regional level. This approach is only successful if direct support is provided by trainers and the wider deanery apparatus, as was utilised here. This model is unusual as trainee-led innovation is often restricted to local innovation. The innovations and changes were proposed by trainees and their representatives, worked into proposals, evaluated and piloted. All elements have collated feedback from participating trainees, with transparency to ensure feedback is utilised to shape future innovation (creating a closed loop). Feedback was collected digitally soon after each innovation, ensuring ‘real-time’, meaningful feedback. Where possible, feedback was made compulsory for the issuance of attendance certificates or similar, to ensure high response rates.
RESULTS

The model has been highly effective, with all elements fully embedded into routine HEWM D&E education/training. Trainees are familiar with, and supportive of, the initiatives. The effectiveness of the intervention is demonstrated by the responsiveness of the model to the unexpected COVID-19 pandemic. Trainees’ digital support continued during the pandemic, including delivery of a TPD briefing, virtual pituitary training, further planned virtual sessions, a virtual Annual Review of Competency Progression and examination preparation group. The communication approach was used to deliver a redeployment and specialty exposure assessment across 10 regional NHS Trusts. This is believed to be the only assessment of its kind and noted substantial variation in the experiences and exposures of trainees, supporting educational restoration. Importantly, in terms of effectiveness and trainee perceptions, the overwhelming request from trainees was to restore the full training model as soon as possible.

SUSTAINABILITY AND SPREAD

This model has sustainability at its core and can be readily disseminated across regions and internationally. The opportunities of digitisation have resulted in a calculated reduction of 100 human hours, worth £3,000 in human resources cost. Another benefit has been a reduction of 60,000 litres of water pollution over a single year through a decrease in, or near elimination of, the use of paper. Prior to going paperless, approximately 1,200 pages were printed annually for training days. Although this amounts to only £20 for paper and £30 for toner, between four and 19 litres of water is needed to produce one sheet of A4 paper, depending on quality. This fact was used to estimate that the initiative avoided 60,000 litres of water pollution. This is before taking account of the reduction in recycling, landfilling, deforestation and air pollution which will ultimately contribute to climate change. Furthermore, sustainability has been ensured by creating a protocol for the training rep roles, enabling these positions to be handed over smoothly and meaning innovations are not dependent on any one individual or group of individuals. A shadowing period at the point of handover is also included to ensure continuity. Information about the training model has appeared in a peer-reviewed journal and it is hoped that the QiC Awards will further promote and support dissemination of this essential work.

JUDGES’ COMMENTS:

“This was a simple yet effective idea that allowed registrars to continue to get teaching during the COVID-19 pandemic. This initiative has the potential to change the way teaching is implemented nationally, and could easily be scaled-up to broach educational access issues across different deaneries. A fantastic, innovative approach to diabetes education!”
**DIABETES EDUCATION PROGRAMMES – HEALTHCARE PROFESSIONALS**

Making Insulin Treatment Safer (MITS) Through Reflective Case-based Discussions  
by Queen’s University Belfast

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**SUMMARY**

This project supports newly qualified doctors, final-year medical students on a pre-prescribing programme, and other insulin-prescribing professionals, to examine their insulin prescribing for inpatients via case-based discussions (CBDs). The CBDs are facilitated by a Making Insulin Treatment Safer (MITS) trained doctor, nurse, pharmacist or person with type 1 diabetes (patient advocate). The aims are to empower prescribers to: handle the inherent complexity and uncertainty of prescribing insulin; work well with different disciplines and levels of seniority; respect patients’ rights to be involved in their own care and consult other people and information.

**METHOD**

The core activity is a MITS reflective CBD. A prescriber spends, on average, 30 minutes, one-to-one with a facilitator who has been trained to conduct an empowering, reflective conversation. The facilitator may be a pharmacist, doctor, nurse, or patient advocate. The CBD ends with the prescriber verbalising what they have learned and making explicit, written commitments to appropriate future prescribing behaviour based on their reflections of the CBD. The SMAC2 reflective tool was developed as a way of learning based on best research evidence, theories of clinical uncertainty and error, and reflective education principles. SMAC2 stands for: ‘Situation’, ‘Myself’, ‘Act’, ‘Check’, and ‘Check again’. It also offers some ‘Top Tips’ for effective insulin prescribing. This approach helps prescribers develop situational awareness, which is a key professional skill, and learn reflectively from experience. A set of standard operating procedures (SOPs) guides the implementation of MITS. Facilitator training begins with a half-day group experience, either conducted face to face or virtually. The training pathway continues with observation, supervision and mentorship to help facilitators achieve capability and accreditation. CPD certificates are issued on completion of training and accreditation is awarded when the facilitator pathway is completed. All Trusts in Northern Ireland (NI) were involved in phase 1 of the MITS project, with two moving towards flagship status in MITS2. Implementation was led by the MITS team along with Trust-based MITS Champions, who supported facilitator training and organised reflective CBDs at a local level. The plan is for all five Trusts to move to full implementation.
RESULTS

The proof-of-concept includes: progressive adoption of MITS into all medical, nursing and pharmacist prescribing education programmes in NI; acceptance by front-line clinicians; advocacy from those who educate them; evidence that MITS promotes interprofessional learning and patient involvement; positive effects on the morale of prescribers and facilitators, plus support from senior regional policy leaders. Educational theory and evidence provide a strong argument that these will improve patient care, reduce harm, and shorten length of patient stay over years, rather than months. MITS education is potentially transferable to any drug; indeed, to any safety-critical situation. During MITS2, one-to-one MITS CBDs were conducted with 60 medical foundation trainees and 77 medical students. The MITS reflective toolkit was taught to 100 nurses from two universities undertaking nurse prescribing courses, 42 participants in the Pharmacy Foundation programme, 10 trained and four trainee hospital-based dentists and two dental nurses, plus many other clinicians from physiotherapy, podiatry, and primary healthcare. A total of 54 de-briefers learned to conduct reflective CBDs with clinicians. MITS is now included in the basic prescribing curricula of all NI health professionals. Furthermore, nine facilitators are patient advocates. One of the most important outputs is a toolkit including standard operating procedures, evaluation instruments, and other materials that enable educators to transfer MITS to other locations. These are held as PDF documents and are all covered by Creative Commons licences, which allow others to use and reproduce them, but not use modified versions of them under the MITS/SMAC2 brand without written permission. Others are encouraged to use the MITS toolkit and provide feedback about their experiences. In addition, a website was developed as a central resource and for access to information and contact details. A leaflet has been produced for wide dissemination, which summarises the actions taken over the previous three years. It introduces a rebranding from ‘MITS’ to ‘Act Wisely’, which was an outcome of the project feedback. In addition, a stakeholder event was held in collaboration with Diabetes UK NI, at which a BBC journalist who has Type 1 diabetes facilitated. All stakeholders were invited, half of whom were people with Type 1 and Type 2 diabetes. One outcome of the event was that people with diabetes gained an understanding of the pressures that foundation doctors experience in their early careers. On the other hand, the professionals who attended gained an objective view of the expertise of people living with diabetes.

SUSTAINABILITY AND SPREAD

MITS is a long-term intervention, which aims to change the prescribing culture and influence the quality of practice and patients’ experiences of care. A joint statement by UK regulators and education providers has recently made the policy context more supportive of reflective education, which adds credibility to this approach. Further funding is being sought to develop reflective CBDs, facilitated by service users and health professionals, for all 250 assistantship medical students in the Queen’s University final year cohort 2021, and to transfer to two other implementation sites in the UK. The sustainability of MITS has been reinforced by increasing the range of programmes within which it is implemented. It is embedded in the nurse and pharmacist prescribing curricula. It has been successfully piloted in the 2019-2020 undergraduate medical programme and there is a commitment for this to continue at scale, in future years. A generic equivalent of the intervention has been developed. Presentations, networking, and accolades have attracted interest from other parts of the UK, including the Severn Deanery, where it is currently being implemented. In addition, there have been expressions of interest in developing this project from Galway, Glasgow and London. The plan is to develop a UK-wide Act Wisely/MITS Collaborative.

JUDGES’ COMMENTS:

“The judges felt that this initiative was a fabulous idea that really put patient care at the heart of its innovation. The feedback from the patient facilitators was especially great to read, and you can tell that this programme really made a difference.”

www.qualityincare.org/diabetes
SUMMARY

Figures suggested that patients with diabetes in the Medway Clinical Commissioning Group area were 88.6% more likely to have a heart attack and 85.7% more likely to have a stroke than the general population. Also, targets for blood pressure and cholesterol were below the NHS England average. These findings prompted a service re-evaluation. Glycaemic support is inadequate to manage macrovascular complications, but a multifactorial management approach can reduce cardiovascular mortality by about 50%. A pharmacist prescriber ran a pilot service for eight months, using a cardiometabolic approach to review glycaemic control, blood pressure and chronic kidney disease in five practices.

METHOD

Audits of the diabetes register were conducted through the software EMIS. All patients with either an HbA1c of ≥ 58 mmol/mol, blood pressure of ≥ 140/80 mmHg or total serum cholesterol of ≥ 5 mmol/l were identified. This list of patients was provided to the practices so they could arrange the initial appointments (appointment one). A total of 698 patients were identified and 2,094 appointments were offered to practices, equating to three per patient identified in the initial audit. The initial appointments were offered to patients who had agreed to participate in the service. Any patients who had had no HbA1c, cholesterol, creatinine, or UACR measurement taken in the previous three months, had these tests requested again before the initial baseline review. The service began in mid-April 2019 to allow the first practices at least four weeks to arrange these clinics. If interventions were made, the patients were seen again between two and four weeks later (appointment two) and then again for a follow-up appointment at three months (appointment three). Patients were given the option of having appointments two and three conducted virtually or via instant messenger. Each patient received a feedback questionnaire to complete in their own time and hand back to reception. All consultations were complete by December 2019.
RESULTS

By December 2019, a total of 507 patients had been reviewed, with the provision of 1,003 patient consultations and delivery of 974 accepted service interventions. This service brought a range of benefits including; meeting the primary KPI and ensuring that all practices utilising the service were above the NDA Medway CCG and NHS England averages for T2DM patients meeting all three treatment targets as of December 2019; facilitating the measurement of the eight key care processes at each practice, with a notable increase in Urine Albumin measurements; ensuring that patients received essential CVD risk reduction measures and actively screened diabetes patients for arrhythmias and heart failure; reducing referrals to the community specialist diabetes team and providing a seamless service to patients for injectable and insulin therapy, facilitating fluid and safe patient management; taking a targeted approach to patient follow-up, ensuring patient safety, optimising therapy and discontinuing ineffective medicines, thereby eliminating clinical inertia and reducing waste and medicines costs; facilitating the NHS long-term plan by enabling patients to achieve recommended diabetes treatment targets and reducing variation between practices, as well as helping to meet the CVD milestone of preventing up to 150,000 heart attacks and stroke cases over the next 10 years through prevention of two coronary heart disease events, one stroke or three overall CVD events over the next five years.

SUSTAINABILITY AND SPREAD

The service has gained funding for a further 600 patient reviews for 2020/2021 from The Paula Carr Diabetes Charitable Trust with stakeholders of additional practices and Medway Hospital Foundation Trust. This service evaluation has been submitted as a business case to Kent and Medway CCG. As a result of COVID-19, all long-term condition pathway considerations have ceased for the time being. It is hoped that, in due course, it will be considered for broader roll-out across Medway CCG, with a five-pharmacist team to deliver specific and targeted diabetes care to patients at those practice in most need. The service is operationally efficient, with all service interventions actioned immediately. All consultations are entered directly to the EMIS practice system without delay to ensure that all clinical governance requirements are met when compared with awaiting correspondence for GPs to action from the external diabetes service, which can cause delays in patients receiving their medications. This service would be delivered directly from general practices and remotely, thereby saving premises costs and expensive information technology installations. Since pharmacists would travel between practices, the costs could be shared appropriately. As this evaluation has shown, a targeted approach can yield cost savings and deliver measurable clinical outcomes. It facilitates the NHS long-term plan in enabling patients to achieve the recommended diabetes treatment targets, reducing variation between practices and having the potential to reduce CVD events. This service is feasible, cost-effective and can be implemented in a short period of time. There is no shortage of trained pharmacist prescribers. The impact and benefits of this service are considerable and should be considered for implementation across Kent and Medway.

JUDGES’ COMMENTS:

“The transformation achieved in this submission is almost unparalleled – it is a great example of the benefit that pharmacists can have in diabetes care. This is a fantastic idea that deserves to be championed, and a model that needs to be replicated elsewhere. The cost was small, but the difference made to patient care was enormous. A deserving winner!”
PATIENT CARE PATHWAY, SECONDARY AND COMMUNITY

WISDOM: West Hants Improving Shared Diabetes Outcome Measures. A Blueprint by West Hants Community Diabetes Service

SUMMARY

WISDOM (West Hampshire Improving Shared Diabetes Outcome Measures) was developed in September 2017 in response to below average CCG NDA outcomes for the three treatment targets for type 2 diabetes. The project evolved from a blueprint for Primary Care Network (PCN) management of diabetes to a sustainable component of the new community service contract (April 2020). It focuses on professional culture change, rapid clinical results and wider adoption across the locality. It illustrates how a large, population-level intervention can deliver measurable results within two years, change existing commissioned activity and influence neighbouring Dorset and Southampton CCGs to adopt it.

METHOD

Emerging PCN clusters were mapped with stakeholders and offered quarterly cluster meetings facilitated by a GP with a special interest (GPSI) and Diabetes Specialist Nurse (DSN). Patient feedback was gathered to develop the curriculum for a new structured education refresher session titled ‘WISER’. In terms of staffing, funded backfill enabled each practice to release one GP and one Practice Nurse. Practices also received additional funding for a monthly in-house meeting to discuss 15% of their complex cases identified from audit data. WISDOM project staff were in place from December 2017, with a go-live date planned for March 2018. Staff were relied upon to be flexible and willing to take up short-term contracts and backfill other roles so the project roles could be filled. A GPSI was appointed to peer-lead the PCN cluster meetings. The project team included the GPSI lead, DSNs (1.0 WTE), Consultant Diabetologist, CCG and Medicines Management lead.

During 2018/19 (Year 1), a total of 46/49 practices in nine PCNs participated in 36 PCN cluster meetings. Each quarter the ‘live’ data was extracted anonymously using the PRIMIS GRASP DM Diabetes Audit tool. Discussion of metrics and appropriate solutions was actively encouraged. Through discussion and a review of best practice, upper targets were set for the Amber Treatment Target criteria (and, by default, the Red criteria warranting a potential referral to the specialist service). Patients identified a need for refresher Type 2 diabetes education and contributed to shaping the curriculum, resulting in the inclusion of a psychological component. Process mapping was also offered to surgeries where a need or variation was identified.
RESULTS

Participation in the WISDOM project provides GP surgeries with quarterly feedback about the numbers of patients who are achieving all three treatment targets (Risk rated GREEN) so they can stratify patients for further intervention. PRIMIS GRASP DM audit data extracts the results from the preceding 12 months, while the National Diabetes Audit (NDA) extracts data from the preceding 18 months. Over the course of the project it has been reassuring to note that the figures generated by PRIMIS GRASP DM and NDA (as they become available) are closely analogous, but not identical. Importantly, PRIMIS GRASP DM data enable closer tracking of improvements than is possible with NDA data. PRIMIS GRASP DM data demonstrate the success of WISDOM over two years from December 2017 to December 2019. Measured by Treatment Target achievement alone, WISDOM outperformed the national rate of improvement more than twice over. In addition to population level improvements in the 3TTs, the team delivered: WISER three-hour patient education refresher sessions, including a psychology presentation; process mapping visits (n=25) producing summary reports with recommendations for improvement; a WISDOM conference in June 2019; motivational interviewing workshops (n=8); a Big Team Meeting leadership event that included teams in Dorset and Southampton CCG, secondary care colleagues, CCG partners and community teams; a qualitative review in January 2019, which identified these themes: process improvements, cultural change and learning and knowledge. Since April 2020 WISDOM has been commissioned into the community contract, replacing, and improving on, the previous Consultant Outreach project.

SUSTAINABILITY AND SPREAD

An ambitious vision has been launched to target ‘Amber’ risk patient groups in a large Type 2 population in order to improve outcomes and reduce complications. The project set out to drive improvement through culture change while explicitly targeting investment in primary care. In June 2019 the first Wessex WISDOM conference was held, giving a platform to national and local speakers and being well attended by all stakeholders. A Toolkit was developed for members of Gloucester CCG who attended a one-day WISDOM workshop in January 2020. The Twitter handle @WISDOMdiabetes has enabled wider dissemination of progress. WISDOM has continued, uninterrupted, using Zoom cluster meetings during the COVID-19 pandemic. It is suitable for COVID-19 recovery plans and travel costs, room hire and primary care costs will be reduced significantly.

JUDGES’ COMMENTS:

“A remarkable project – this is a true innovation in the diabetes healthcare setting. The initiative demonstrated an effective use of resources, with good outcomes across many practices. The judges particularly liked the proactive approach and felt that the project’s far-reaching benefit was a massive achievement for all involved.”
A multidisciplinary inpatient diabetes service (IPDS) model was developed to improve inpatient diabetes care. This18 months. The aim was to amplify outcomes via the augmentative effects of each single intervention. Outcome data demonstrated significant success in supporting staff, protecting at-risk patient groups, empowering patients via education and preventing glycaemic harms. The qualitative improvement outcome, cost-effectiveness and sustainability were acknowledged by significant additional funding to expand the IPDS team. Data from this work supported the recent JBDS/IP national guideline on Diabetes Inpatient Specialist Nurses (DISN).

Quality Improvement methodologies were used to implement interventions and monitor outcomes. The following key primary drivers, secondary drivers, and project goals were identified. The primary drivers were: meeting national recommendations on a good fit-for-purpose inpatient diabetes service; increasing coverage for hospitalised patients with diabetes; modernising service delivery. The secondary drivers were: focusing on at-risk hospitalised patient cohorts; increasing educational and preventative measures for staff and patients; sustainable funding and resources for IPDS team. The project goals were: supporting staff; protecting at-risk patient groups; empowering patients via education and preventing glycaemic harms. The principal outcomes measured were in clinical productivity, encompassing the quantity and quality of each patient care encounter. The following index activity data were meticulously recorded for each patient encounter: Insulin initiation, titration, education, and support; intravenous insulin infusion support; diabetes oral medication initiation, adjustment, and support; Hypoglycaemia; DKA; HHS; enteral and parenteral feeding in hospitalised patients with diabetes and/or hyperglycaemias; inpatient diabetes dietetic input; patient demographic; time spent with each patient; plus first bedside visit, or follow-up visit(s). Successive implementations of interventions were made over the 18-month period from January 2018.
RESULTS

Clinical productivity data were analysed on (i) patient care encounter episodes and (ii) index activities over the half-year intervals January-June 2018; July-December 2018 and January-June 2019. These data were compared against those in the half-year from July-December 2017. Statistical analysis was used to ensure the achieved changes had not happened by chance. Measures to help staff included successively increasing both the quantity and quality of diabetes in-reach support for staff and hospitalised patients with diabetes. The number of patient care encounter episodes increased from 1,541 to 2,281 per half-year (an increase of 50%); the number of index activities also increased from 2,033 to 2,960 per half-year (up 45%). This represents an increase in the proportion of patients covered, from 30% to above 50%, considering that the Trust has approximately 4,500 hospitalised patients with diabetes per every half-year interval. Diabetes support was increased significantly for elderly and surgical patients, who are recognised as being at risk of increased morbidity and mortality during hospital stays. Of the total number of patients cared for by the team, the proportion of elderly patients increased from 10% to 16% and the proportion of surgical patients increased from 28% to 31%. The service took a more empowering, educational approach with enhanced continuity for hospitalised patients with diabetes. Intensive follow-up activity rose from 50% to 53-57% and included support on medicinal initiation, adjustment, bedside and remote virtual follow-up. Dedicated educational activity increased from 5% to 12% and covered support on glucose monitoring, insulin self-administration, sick-day rules, hypoglycaemia advice and dietetic support, among others. A significant reduction was noted in severe glycaemia harms (severe hypoglycaemia, DKA, HHS, and inappropriate intravenous insulin infusion usage) requiring intervention, lowering from 16% of total index activity to almost 10%. This was despite the implementation of obligatory referral and automatic detection systems. Improvement in hypoglycaemia prevention appears to be the biggest contributor to such changes.

SUSTAINABILITY AND SPREAD

This NIPDS initiative began with a long term, substantial Trust and CCG commitment of £210,000 per annum. All positions within the enhanced inpatient diabetes service team are substantial posts. All interventions implemented during the 18-month period are permanent, with a view to long-term service redesign from the outset. There was commitment from all stakeholders, with the local authority providing significant additional support for the expansion of the IPDS team (3.0 whole-time-equivalent DISN), totalling approximately £120,000 per year of further funding. Sustainability, integration and compatibility were demonstrated by the outcome data over the 18-month period; they also demonstrated how individuals, specialty teams and hospital systems could be brought together collaboratively and efficiently. The long-term data collection system proved both accurate and efficient, in terms of clinical activity data capturing, repeat interval evaluation, and setting of further milestones. The team paid special attention to understanding the needs of individual staff, clinical teams and hospital management teams. Extra efforts were made to share the vision of the NIPDS project to gain support for improved IT infrastructure. The many interventions and networking helped to minimise disruption from the COVID-19 pandemic. The service was adapted according to the requirements for infection control, the health-risk category of each team member, in-reach care support and front-door diabetes admission management. Dissemination to colleagues was made via peer-reviewed professional meetings and networks (regional and national), including East of England Inpatient Diabetes Care Group, East of England Diabetes Clinical Network, DISN UK Group, ABCD and Diabetes UK. Outcome data were peer-reviewed, accepted and presented at the most recent Diabetes UK professional conference. The plan is to submit the same data to a diabetes journal in the coming months. Data from this work also helped to shape the recent JBDS-IP national guidelines on hypoglycaemia and DISN staffing levels. Ongoing quality improvement work is shared with patients and the public through face-to-face diabetes campaigning events and social media.

JUDGES’ COMMENTS:

“The cumulation of efforts in this submission made a real difference to patient outcomes in inpatient diabetes. This initiative demonstrated long-term, sustainable practice in a particularly important area of diabetes care. The clinicians involved highlighted the issue and continued to address it over the years. A very sustainable entry!”
PATIENT CARE PATHWAY, SECONDARY AND COMMUNITY

Developing a Community ‘Walk in’ Clinic for Diabetic Foot Disease
by Community / Cardiff and Vale UHB

SUMMARY
Approximately 1% of the NHS budget is spent on active foot disease in diabetes. As up to 80% of these foot problems are largely preventable (Kerr et al, 2019) this is economically unviable and unsustainable, as well unacceptable for patients and healthcare professionals. Early intervention is the answer. The ‘walk-in’ clinic allows access to a member of the multidisciplinary foot team (MDFT) when care is needed, ensuring timely, effective care. Providing opportunities to support care closer to home, without the need for a primary care referral, enables patients to access the most appropriate service at times of crisis.

METHOD
To facilitate the implementation of the WIC without additional resource, without causing undue additional pressures on the podiatry service and to achieve the specific objectives, the WIC was initially piloted twice a week on a Tuesday and a Friday within the Podiatry Department’s clinical hub. As the likely demand was largely unknown, the pilot initially invited patients from one locality of Cardiff, comprising a cluster of 10 GP practices, to attend. It ran from 7 December 2018 for eight weeks. It was advertised using various means: in GP surgeries using a flier on their TV screens, via social media, a mailshot to the HCPs in these localities using a new infographic as a poster, and as a hand-out leaflet. The project was also promoted directly to the existing caseload of patients receiving podiatric care.

The data for the project was gathered primarily using the NDFA data collection tool. Additional data were also captured manually through a case note review process. Processes within the Podiatry Department were streamlined; a podiatry clinical assistant triaged patients, collected baseline information and provided simple re-dressings, after full assessments and treatment planning by the podiatrist. Feasibility testing during the pilot phase led to the opening of WIC to all GP practices within the Cardiff and Vale boundary in February 2019.
RESULTS
The project followed change management methodology, principally Kotter’s 8-step change model, to ensure there was stakeholder engagement, to manage obstacles to change and enable sustained change. It improved access to HCPs with the appropriate skills to manage this complex patient cohort, with patients receiving timely and seamless care with vascular, orthopaedic, microbiology and diabetes colleagues when needed. The results from the NDFA support this, with significantly more patients self-presenting after the commencement of WIC, suggesting an improvement in patient activation. The numbers of patients waiting longer than three days has reduced from 55.36% to 35.45%, which indicates this type of service provision supports timely access for patients. This prompt access to care has also demonstrated positive improvements to the clinical outcomes of the patients. NDFA data show that the number of patients with persistent ulcerations has reduced, the numbers alive and ulcer free has increased and the number of patients with less severe DFUs has increased, all of which correspond with early intervention. Ensuring appropriate, effective care is available closer to home has meant that many patients have not required hospital admission. Their ‘foot attacks’ have been managed in the community using an MDFT approach, preventing unnecessary burdens on acute hospital sites but facilitating a patient-centred approach. This has also supported a ‘step-down’ approach within the Podiatry Department, which enables appropriate use of resources and skill mix which underpins the prudent principles of healthcare in Wales.

SUSTAINABILITY AND SPREAD
Within the organisation successional planning has been a key objective to support the All Wales DFU pathway and sustainability of diabetic foot services. Ensuring podiatrists have the appropriate skills and experience to provide this high level of care supports the viability of this model. Taking the project through the NDFA collaborative has permitted country-wide exposure and dissemination through sharing best practice. At a local level, WIC has been embedded into the diabetes healthcare pathways for primary care, ensuring early access at times of crisis for patients. Patient collaboration is key and the patient representative in the DSIG has been crucial to support its adoption. The resources to expand and develop such clinics and enable sustainability will come through improved healing rates and patient activation to access at times of crisis. It is well documented that activated patients use less resources and have better outcomes (Rix & Marrin, 2015). Many patients are concerned about accessing services when needed. The WIC supports their engagement and facilitates access to care when required. There are plans to increase the number of WIC operated during the working week. The introduction of Patient Group Directives (PGDs) will facilitate a ‘one-stop shop’, increasing clinical and cost efficiencies in addition to improving patient experience. Using video consultations will further support patients and HCPs to ensure timely access to care. Further work is planned to engage patients from ‘hard to reach’ groups, such as BAME, through a local organisation, The Mentor Ring. This will ensure there is equity of access for patients from any social background. The results of the project have been shared with colleagues across Wales through the All Wales Diabetic Foot Network. Sharing what has worked well and not so well has provided opportunities to consider further development ideas, such as incorporating technology like apps and telemedicine to enhance current provision. The results of this project support patient activation to reduce the growing economic burden of diabetes on the NHS. Further evaluation of patients’ experience of the WIC is planned, as is the introduction of patient activation and coaching to support a future All Wales work stream, in order to develop a patient foot crisis prevention model.

JUDGES’ COMMENTS:
This was a simple but effective project that has the potential to be quickly implemented widely across diabetes care. Those involved in this initiative adopted a ‘just do it’ attitude that targeted a specific sub-population, which was a fantastic idea. This project put patients at the centre of its approach and looked at the individual needs of each and every person involved.
SUMMARY
Project DEFEND was established to improve the quality of diabetes care and safety in Brent’s frail adult community. It aligns local pathways and resources to create a data-driven collaborative care model. The databases of five GP practices highlighted that, out of 1,000 patients with frailty, 695 had an HbA1c lower than 58 mmol/mol. Of these, 100 patient records were reviewed in a virtual clinic with primary care clinicians and grouped into high, medium or low risk of diabetes emergencies. More than 40% were in the medium or high-risk group, over 60% needed a medication change and nearly 20% needed referral to supported care.

METHOD
Searches were conducted in five GP practice EMIS systems to find people with diabetes aged over 65yrs, including HbA1c, frailty, medication and dementia. This resulted in 1,000 patient records, which were grouped into high, medium or low risk categories, based on the following criteria. The group termed High Risk were on the following medication: Sulphonylurea/glinides/Insulin/polypharmacy. They had HbA1c above 100 mmols/mol and less than 53 mmols/mol, severe frailty, an eGFR <30 and were on metformin; they had dementia/end of life/other severe comorbidity and a recent ambulance or 111 call out (due to hypoglycaemia or hyperglycaemia), a recent admission for Hypoglycaemia, frequent telephone consultations, DNA appointments, homeless or living alone, housebound and with safeguarding concerns. The Moderate Risk group were on: Sulphonylurea/Insulin/Polypharmacy. They had a HbA1c of 53 to 99 mmols/mol and moderate frailty. Their eGFR was <30 and they were not on metformin. They had DNA appointments, were homeless or lived alone, were housebound with District Nurse (DN) visits and had had no review in the past year. The Low Risk group’s medication criteria was that they were on dual oral therapy, not including medications causing hypoglycaemia, and not on insulin. Their HbA1c was 58 to 70 mmols and frailty was mild. They did not have the other conditions included in the moderate and high-risk groups. Next, a virtual clinic at a GP practice risk stratified 100 patients into low, medium or high risk based on HbA1c (lower than 58 or higher than 75) and medications that can cause hypoglycaemia. Relaxed HbA1c targets were recommended with suitable medication changes. The GP EMIS system was used to set up and run searches for Frailty, Medication, HbA1c, Dementia, Heart Failure. The 100 records were reviewed in a GP practice via a virtual clinic session and the data were analysed and risk stratified. The data were reviewed and discussed with the team. Meetings were held with DNs and the Complex Patient Management Group (CPMG) to review patients and develop a seamless pathway to manage this vulnerable group.
RESULTS

Of the 100 records reviewed, 22% were high risk, 22% were medium risk and 57% were low risk. The number of people with HbA1c was lower than 58: 81%. The medication review and changes resulted in 62% having a metformin dose adjustment due to low eGFR, 19% had their sulphonylurea dose reduced or stopped, and 19% were referred to DNs or the CPMG for supported care. These results highlight the gap in the care for this vulnerable adult group who are exposed to direct risks from diabetes-related complications or inappropriate use of medications, and to indirect risks because of age-associated frailty, dementia or other chronic health conditions. Just over 80% had HbA1c lower than the recommended range for this group and more than half of them needed an intervention, either in the form of medication change or supported care. These practice-changing results led to incremental implementation of targeted searches and interventions in GP practices across Brent by BIDS nurses. In addition, wider dissemination of the results to primary care colleagues resulted in proactive searches and medication changes by the clinicians working in primary care.

Data collection and analysis was paused because of COVID-19, but the learnings from the above data have been applied in the day-to-day virtual consultation model.

SUSTAINABILITY AND SPREAD

Learnings from this project have already been incorporated into daily clinical practice in the form of a focused approach to the high-risk adult group with frailty, dementia or at end-of-life. Dissemination of these results by nurses, via GP communication channels and one-to-one visits (face to face or virtual), have led to proactive implementation of risk stratification, safer HbA1c targets, mitigation of hypoglycaemia risks and safer diabetes medication use in people with lower eGFR in primary care. This data-driven model can be implemented by primary care with some support from specialist diabetes teams working in the community, which is becoming a standard model in the UK. Therefore, the learning from this project should be scalable and sustainable, as well as cost-effective in the shorter and longer term.

Expansion plans were limited by the pandemic, but plans are in place to review the data and share it with peers in due course. The WHAT next plan is to: Work with other stakeholders like CPMG, Integrated Care Practice and Primary Care Networks on virtual clinics, care planning, and user-friendly functional integration pathways; Have planned PDSA cycles to improve services; Audit to learn from dashboard and survey data for individual and population level care planning; and develop a better Type of education with learning modules for patients, carers and HCPs.

JUDGES’ COMMENTS:

"This submission clearly outlined its goals and set out what they wanted to achieve, in an important area of diabetes care. It both targeted a vulnerable population and improved outcomes, and clearly communicated a message that needs to be widely disseminated and praised."
SUMMARY
This innovative pilot project delivers a targeted approach to prevention of type 2 diabetes in Wales using the criteria of HbA1c, hypertension, obesity, age >45 years, followed by a brief intervention utilising unregistered practice-based staff trained by registered dietitians in a Nutrition Skills for Life course. An all-Wales diabetes prevention pathway was developed to enable scalability of this initial primary care cluster work. Evaluation showed this to be an effective model, with 62% of participants going from pre-diabetes to normal glycaemia. The health economic review predicted the cost per QALY gained to be -£5,300.

METHOD
This was a real-world cohort intervention with participants acting as their own control. It was a new service evaluation intervention on utilising trained support workers and not a clinical trial. The pilot cluster in Afan Valley serves a population of 50,566 patients in an urban, semi-rural environment. A total of 49% of this cluster is in a most deprived area, with a further 32% in the next most deprived area. The pilot project and rollout phase inclusion criteria were: HbA1c of 42-47mmol/mol in the last 12 months; aged between 40 and 75 years, plus a BMI>30kg/m2. Lifestyle intervention was offered to all patients, regardless of HbA1c results (during the rollout phase patients were excluded if HbA1c >47mmol). HbA1c was repeated approximately 6-12 months later. All Health Care Support Workers (HCSWs)/facilitators undertook the following training prior to delivering consultations: Agored Cymru accredited Level 2 Nutrition Skills for Life (3 days) delivered by the local Community Dietetics Department (part of the larger ‘Nutrition Skills For Life’ course), providing the competencies required to promote healthy eating messages; a half-day facilitator training for Pre-Diabetes Consultation. A dietitian provided the HCSW with regular support, including access to computer systems, review of the usage of the telephone script, feedback on areas that worked well and aspects to consider for future delivery, as well as verbal and written feedback prior to the next booked consultations, and quality assurance.
This entry was a clear winner, demonstrating a targeted approach to identify the patients who needed required it the most. What made this entry stand out was its innovation and impressive cost-efficiency as well as its potential scalability. Not only did this programme deliver impressive outcomes for patients, but also empowered the healthcare assistants involved as well. A very compelling programme!
COMMENDED

PREVENTION, REMISSION AND EARLY DIAGNOSIS

Scalable, Flexible and Cost-Effective Diabetes Prevention
by Discover Momenta Ltd

SUMMARY

Discover Momenta has worked for 20 years to develop, evaluate and disseminate behavioural healthy lifestyle programmes for delivery by trained non-specialists. The aim was a scalable and replicable, evidence-based Type 2 diabetes (T2D) prevention programme (DPP) to achieve world-class health outcomes cost-effectively across multiple commissioning/delivery contexts. Momenta’s DPP has been independently evaluated as achieving the best health outcomes (weight-loss and HbA1c reduction) of all NHS DPP (NDPP) providers (Valabhji et al, 2019). It is demonstrably the most cost-effective. Furthermore, it has led to further programmes in T2D remission and cardiovascular disease prevention, launching in September 2020.

METHOD

The NDPP framework tender for a new national service clarified the need and catalysed this DPP development. The tender required full delivery so Reed Momenta (RM), a joint venture with Reed in Partnership, submitted the bid. Momenta’s role was to develop the DPP at its own cost/risk and to license delivery to RM by go-live. Timeframes were tight, with service commencement within six months of Framework and three months of the local delivery contract award. A day-by-day timeline was developed, with individual responsibilities to track progress/dependencies across all elements of a licensed, 18-session, in-person programme for participants, coaches and licensee. Weight management programme participant feedback was incorporated, and later improvements/adaptations included extensive DPP participant feedback. The programme development approach is to optimise the ‘Bermuda Triangle’ of clinical effectiveness, operational replicability, financial viability and cultural competency to maximise impact at scale, all underpinned by a collaborative partnership ethos and transparency. An experienced programme development director (PDD) managed the multi-disciplinary team, taking the programme and training from NHSE/PHE/DUK specification to a scalable, replicable and cost-effective service. This complex behavioural intervention incorporates relevant NICE guidance and international evidence across the following essential ‘programme elements’: a structured curriculum, promoting active group participation and peer engagement/support, underpinned by clear learning outcomes, timetabled session plans and personalised participant journeys (18 sessions); high quality, Accessible Information Standard-compliant, interactive participant resources; comprehensive coaches’ manuals and kitbags, plus in-person training, underpinned by distance learning and online assessment. The PDD assessed progress against the daily plan/milestones in weekly calls. A two-phase approach was adopted, whereby the first 12 sessions (18 weeks) were developed, followed by the final six sessions. This enabled the programme to go live on time without compromising quality. In parallel, RM received tender support, a clear licence agreement, an interim Clinical Director, a Quality Assurance Framework and technical support. Weekly contacts advised on mobilisation and agreed a Minimum Data Set (MDS) for performance analysis. The initial goal was met, which was to launch five contracts (South London to Herefordshire) on schedule. Over the subsequent four years the same approach was used to make adaptations for Northern Ireland and NDPP Framework 2, as well as for development of T2D remission and CVD prevention programmes. Furthermore, reactive interim management support was provided when RM encountered unanticipated staffing challenges, and training/digital resources supplied to ensure COVID-secure virtual delivery. Learnings are shared across licensees in England and Northern Ireland to improve performance.
RESULTS

Superior outcomes and effectiveness derive from Discover Momenta’s understanding of behaviour change, extensive experience, provision of complete solutions, with extensive supporting resources for coaches and participants, highly regarded training, and a foundation in partnership. This solution-focused approach, centred around optimising participant experiences and outcomes, enabled rapid delivery of the DPP and coach training. Momenta has trained over 200 DPP coaches and provided supplementary ‘virtual-delivery’ training. The independent paper by Valabhji et al (2019) stated that the NDPP is effective and compares favourably internationally. It added that, within the NDPP, the DPP provided by RM delivered the best health outcomes across all providers. Chadwick et al (2020) and subsequent unpublished analysis of 10,109 completers (to December 2019) confirmed similar outcomes across larger numbers as participants continue to be referred to, enrolled on, and complete the DPP. DPP NI outcomes analysis was delayed by COVID-19 but anecdotal indications are positive. T2D Remission and CPP results will follow later, as mobilisation restarted in September 2020.

SUSTAINABILITY AND SPREAD

In England RM is licensed as a provider on both NHSE/PHE/ DUK NDPP Framework 1 (2016-20) and Framework 2 (2019-24). Discover Momenta supported RM’s delivery at nine Framework 1 contracts (South London to Cumbria), covering 50 CCGs with >1,500 GP practices generating >75,000 referrals. RM secured seven larger Framework 2 contracts (four mobilising late-2020), which receive referrals into 2023 (contract extension possible).

In November 2018 Momenta won a three-year DPP contract in Northern Ireland (2-year extension possible). Lessons and good practice are shared with English and Northern Irish licensees to support improved outcomes and cost-effectiveness. The continuous improvement process is now on DPPv3.0 and more than 200 coaches have been trained. Many use their transferable skills and understanding of behaviour change in other healthcare areas, representing an innovation multiplier. There has also been participation in multiple conferences and contributions to NHSE provider days. Furthermore, academic research is supported, including the University of Manchester national study, local contract-specific research and PhD dissertations e.g. BAME community perception. Momenta’s poster was accepted for Diabetes UK’s 2020 professional conference and a sophisticated statistical analysis by University of Oxford and UCL researchers will be submitted for publication. The most compelling evidence for sustainability is shown by the collaborative development of two T2D remission and CVD Prevention programmes, based on the DPP. The T2D remission NHSE pilot contract runs from 2020-23. The South Eastern HSC Trust will deliver the CPP indefinitely from September 2020.

JUDGES’ COMMENTS:

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For the judges this was a good all-round initiative which had impressive user feedback which made the programme more personalised. The fact that it also branched out into other areas – namely cardiovascular – rather than solely focusing on diabetes is what made this entry really stand out, alongside its great use of coaching styles.

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SUMMARY

SEREN Connect is a comprehensive education programme to address a long-standing gap in service provisions for Young Adults (YA) living with type 1 diabetes (T1D). It helps teams to support every child with diabetes in Wales. The transition from young person to young adult and the difficulties of trying to self-manage health is hard at this notoriously turbulent time. SEREN Connect provides tools for all healthcare professionals (HCPs) to deliver information on age-appropriate topics that directly or indirectly impact the lives of YA living with T1D. It aims to influence and improve services across Wales, via paediatric and adult colleagues.

METHOD

Early ‘wants’ from developing this project were mixed with ‘needs’ from national guidance and existing good practice to create a programme that could: be co-delivered by both paediatric and adult colleagues; be delivered in a group setting (but also be useful where YA do not attend); be suitable for all YA, irrespective of length of diagnosis; be as inclusive as possible to all YA; create a safe space for YA to discuss T1D from their point of view; include elements of peer support; be replicable in every service across Wales; and feel safe and manageable to deliver for diabetes colleagues. Conversations were held with the SEREN Education Group (All Wales representation of multidisciplinary team of consultants, diabetes specialist nurses, dieticians, a clinical psychologist, parent representatives, and lived experience of diabetes). As SEREN is a paediatric programme, wider representation was needed so a sub-group was formed with extended invitations to adult colleagues and YA living with diabetes to focus on the development of the programme. Some YA who gave initial comments formed a virtual YA feedback panel. They were invited to comment on all resource development. The views and representation of minority groups and communities, including LGBT+, ethnic minorities, religions, and Welsh speaking communities meant that the programme was written to be as inclusive as possible. This led to the creation of various resources published in 2019, including a SEREN Connect Curriculum and facilitator guide front cover with artwork based on YAs’ input, a SEREN Connect A4 box file containing a copy of the curriculum and facilitator guide and all resource cards needed for all four group sessions, plus SEREN Connect booklets suitable for use with young people from Year 9 onwards. These are also given out at SEREN Connect group sessions and/or appropriate for any YA diagnosed with diabetes who does not receive care in paediatrics. The difference between SEREN Connect and existing diabetes education programmes is that it offers additional elements beyond health education that YA need, with the aim of developing self-confidence, encouraging team building and promoting resilience and independence. This is difficult to achieve in a traditional diabetes clinic set-up. It puts the person at the forefront of diabetes care. Having all resources on hand in the delivery box allows flexibility when encouraging uptake of group sessions; they do not need to take place in a hospital setting.
RESULTS

SEREN Connect has been designed to be flexible. Elements of the programme can be introduced to YA when they are most needed. This can take the form of one-to-one consultations to discuss topics such as alcohol and/or sex/relationships from Year 9+ (13yrs); group sessions of 16-18-year-olds to build further knowledge with peers guided by HCPs; when a young adult is newly diagnosed and may already be driving/drinking/sexually active/at university or working. The programme has enabled paediatric and adult colleagues to work together for the first time, with meetings to discuss reconfiguring existing services to accommodate the delivery of SEREN Connect. Some health boards have established a working group for transitional care, with SEREN Connect delivery on the agenda at each meeting. YA have been developing a rapport with adult teams before their care transfers to adult services. SEREN Connect resources have been taken up in all seven health boards and are being used with YA aged 14-25, and beyond.

SUSTAINABILITY AND SPREAD

There is a commitment in the Diabetes Delivery Plan for NHS Wales’ services to deliver SEREN Connect. While there is no updated delivery plan post 2021, it is anticipated that SEREN Connect will be included as a recommendation. Since it was launched, every health board has nominated a paediatric and adult lead to coordinate delivery. Beyond delivery to HCPs, SEREN Connect has been included in an e-learning module for Swansea University’s MSc Diabetes Practice. Electronic versions of a booklet trialled with YA received positive feedback and these have been circulated to diabetes teams since June 2020. Young people in Wales can access the booklet via the Digibete App (which is free to all families living with diabetes in Wales). A lack of age-appropriate information on T1D and foot care or eye care in Wales resulted in new resources being created as part of the programme. The national podiatry network and Diabetes Eye Screening Wales gave input. SEREN Connect is in demand with YA services beyond diabetes clinics, including Primary Care. There has been interest from several trusts in England, including CYPD West Midlands, CYPD South West Network and CYPD Thames Valley, and areas of Somerset, London, the Isle of Wight and Northern Ireland. The programme has been presented at several conferences. In 2020, national discussions have been held regarding taking SEREN Connect group sessions online. A virtual session, trialled by a health board in May, was positively received, so the ‘next steps’ will be to enable more options for engagement.

JUDGES’ COMMENTS:

"The SEREN Project is very impressive, with remarkable results. It is a most effective use of clinical time, money and resource, demonstrating notable involvement from a difficult to reach patient group. It is a carefully developed resource involving a wide range of stakeholders, including young people, that fills a gap in the service and is reducing variation in transition care. It is clearly well received by all, and the numbers of health professionals trained is a reflection of how widely it has spread."
JUDGES’ SPECIAL AWARD

‘Language Matters’
by Language Matters Working Group

SUMMARY
A multi-stakeholder group, chaired by a person with diabetes, developed the ‘Language Matters’ document on the appropriate use of language in the care of people with diabetes. It has been published in India and Pakistan, and will be used in Wales, Brazil, Argentina, Chile and Spain. Another, focused on obesity, is in development. NHS England uses it in the national Diabetes Programme and junior doctors use it as part of the Young Diabetologists and Endocrinologists Forum (YDEF) development programme. A new document, focused on social media, aims to reduce anxiety for people with diabetes, who are more vulnerable to COVID-19.

METHOD
NHS England, in partnership with Diabetes UK, established a working group, comprised of people with diabetes, academic and professional groups and independent organisations, to address how refining the use of language could lead to better clinical outcomes and quality of life for people with diabetes. The stakeholders included Diabetes UK, TREND Diabetes UK, JDRF, Association of British Diabetologists and Young Diabetologists and Endocrinologists Forum. Each of these participated in the development group and endorsed the final document.

The work had two strands. The first was a scoping study to review existing research that could increase understanding of the role of language, as well as identify gaps in knowledge, and inform the second strand. The second strand was the development of a position statement on language in diabetes care. The practice document or position statement highlighted the need for careful use of language and gave positive practical examples of how language could be used.

The practice document was developed by a group chaired by patients and was adopted as best practice by NHS England. Challenging behavioural aspects of care, especially where practice is ingrained over decades, can be difficult, so it was important that the evidence was clear, well presented and that the final document was usable and helpful, as well as highlighting where people could do better.

The work commenced late in 2017 and was published in Spring 2018. The aim was to achieve a national publication that enabled all stakeholders to sign up to the shared ethos and content.

There were many iterations of the document before the group was satisfied that it achieved its purpose of highlighting best practice and improving the way care was delivered. Throughout, the patients played an important role in leading, challenging and keeping the process on track.
The 'Language Matters' project had a very impressive impact, being part of a worldwide movement in an extremely important area. It is likely to have a big bearing on people with diabetes and their healthcare professionals and is a great example of adapting a project for local use and implementation.
SUMMARY

‘ArT1st’ was created in November 2019 by Professor Partha Kar to develop artistic peer support within the type 1 diabetes community, with a live event planned for June 2020. The COVID-19 pandemic put the event on hold. The lockdown adversely affected mental health so, to help lift the mood and reduce social isolation, the ArT1st team launched an online project for the community to send in art contributions. More than 150 were received from countries worldwide over eight weeks. There was much interaction on social media and many positive comments. Friendships developed and artistic collaborative projects resulted. The live event is still planned.

METHOD

The initial ArT1st idea was created in November 2019, with the formation of the ArT1st team, discussions and planning of the live ArT1st event (venue, funding/sponsorship and logistics) for June 2020. This was brought quickly to a halt because of COVID-19 in March 2020, as it was not safe to proceed with the live event.

To help lessen anxiety and social isolation due to COVID-19, the team decided to promote the project as an online daily event with an additional aim to provide peer support and encouragement through art therapy during Lockdown.

Discussions were held by email and Zoom meetings, with the online project launched on 1 April. The website (www.art1st.life) was set up to house all the contributions in a gallery, giving updates about the future live event plans, details of the ArT1st organising team and submission criteria. Social media channels were set up to allow art contributions to be showcased on a daily basis. On launch day, a message was sent out across all the social media platforms and promoted by the ArT1st team to promote the idea and encourage contributions. The ArT1st team shared videos of themselves and celebrities who helped support the initiative encouraging contributions from the artists. Volunteers from the team reviewed the contributions and wrote a small summary for each. There were four posts on all social media platforms daily. Contribution categories were; music, fashion, photography, craft and sculptures, poetry, dance and drama, and art.
RESULTS

Material of stunning quality and variety was showcased every day for two months, attracting interest and participation from people with diabetes of all ages and many backgrounds, as well as from their families and from the HCPs who work with them. The artworks covered a wide range of topics, including describing living with diabetes, artists’ diabetes journeys, living in social isolation, as well as racism, current affairs and abstract ideas. In total there were 167 contributions. On social media, Twitter gained 498 followers and 447 tweets, Facebook gained 1358 friends and on Instagram, 365 followers and 273 posts. ArT1st had contributions from children to adults, with the youngest aged 8 and the oldest having had diabetes for over 60 years. A live event is still planned, which will take place at a prestigious central London venue once it is safe to do so. This will feature some of the best visual material from the online version as an exhibition, and live performances of some of the poetry, music and dance. In the meantime, the organising team is pausing its work, but will continue to host the website and plan for the live event.

SUSTAINABILITY AND SPREAD

Industry support has been secured for the live event. The ArT1st team is committed to continue supporting and working for this initiative. If successful, the team would work to hold the live event on a regular basis. Relationships have been developed with many artists within the type 1 diabetes community who will help promote the live event, as well as support from the original celebrities. The social media sites will help with ongoing promotion. The team has collected data on contributions, social media and website visits, and members are writing up their experiences to share. They are also working on a book to encapsulate the contributions that were submitted during the Lockdown period as a legacy of the time. Any profits will be donated to diabetes charities, JDRF/Diabetes UK.

JUDGES’ COMMENTS:

"ArT1st created something quite special and different in a very challenging environment. The work was started in 2019 to prepare a conference and then they showed true adaptability and commitment by reacting to the COVID-19 situation, changing to an inspiring virtual platform which provided people with diabetes much needed support during lockdown. The judges thought this entry should be recognised with “The Spirit of the Time” award."
The QIC Diabetes programme has been made possible with sponsorship from Sanofi. Sanofi has had no editorial control over any of its contents.