

From the desk of the Chairman, Dipesh Patel

Oh boy, what a year! 2021 has been a challenge for us all. Having recovered from the first lockdown, we started this year with another lockdown and stark pressures on NHS services as COVID-19 once again took hold in the UK. Thankfully, as I write this update, the success of the vaccine programme and the hard work of colleagues and peers has paid dividends and the future is looking much brighter with more than 30 million UK citizens vaccinated and COVID-19 cases down substantially. We have learned many salutary lessons over the course of the pandemic; in particular, many of our patients were vulnerable to severe illness and death and current systems of healthcare need alteration if we are to keep these patients safe. Our hearts go out to other global areas such as India where this terrible virus is causing much havoc and suffering.

ABCD has fortunately been able to react to the challenges in the UK and, moreover, has worked hard to bring colleagues and members new and innovative digital learning, tools and materials to support professional roles.

Our CONcise adVice on Inpatient Diabetes (COVID) guidance led by Professor Gerry Rayman continues to be a key resource for services up and down the UK and beyond, as demonstrated by the number of downloads and page visits (<https://abcd.care/coronavirus>). Existing resources are updated regularly with new resources added to keep up to date with the latest COVID and diabetes guidance. The COVID-19 Audit team comprises a team of leading specialists who are working on a dataset of over 3,000 patients provided by busy colleagues up and down the country, some in adverse circumstances. I am sure this will bring further learning for UK clinicians and result in worthy academic output. I am very grateful to all those involved and colleagues who were able to provide important clinical data for this. Furthermore, I am extremely proud how we, as a body of specialists, can pull together and learn together in the most difficult of times. I am very aware diabetes specialist colleagues have made major contributions to life-preserving acute medical care during the pandemic and now are busy re-

booting services and making them fit for any future adversity.

In the first quarter of this year we continued to run our educational programme of free monthly high-quality webinars featuring a wide range of topics including do-it-yourself artificial pancreas systems (DIY APS), 'The challenges of delivering person-centred care in the virtual world' and 'The use of contemporary diabetes' apps to help with diagnosis and treatment decisions. We will be continuing these webinars every month with a short break over summer, so make sure you register for upcoming webinars (see <https://abcd.care/abcd-webinars-series> for details). I am delighted to see we have contributed to an excellent Diabetes Masterclass series aimed at diabetes trainees in collaboration with YDEF with the support of Eli Lilly. We have plans to focus on training of our future diabetologists who should help shape the future of ABCD. I hope our membership will reflect this in due course. Annual membership has recently been reduced to £25, which we should highlight to our trainees.

We have three regional meetings scheduled to take place virtually this year: our Scottish regional meeting spanning both Diabetes and Endocrine hot topics on 19th and 26th May 2021 (<https://abcd.care/events/abcd-regional-meeting-scotland-collaboration-sfe>), our Yorkshire regional meeting on 17th June 2021 (<https://abcd.care/events/abcd-regional-meeting-yorkshire-2021>) and our South East regional meeting on 2nd December 2021. These educational meetings are open to everyone, not just those from the region.

Our first face-to-face event will be our Consultant Development Programme which runs from 5–9th July and is already fully subscribed.

The annual conferences for both DTN-UK (<https://abcd.care/events/abcd-dtn-uk-meeting-2021>) and ABCD (<https://abcd.care/events/abcd-conference-2021>) will need to take place virtually this year on 13th and 14th October, respectively. **Please save the date.** The conferences will once again be hosted on the vFAIRS platform, so you can expect a high-quality visual experience with interactive parallel sessions, an interactive poster display, virtual exhibition and virtual 'swag bag' to

download free resources. The platform will run live on 13th/14th October and be available for on-demand viewing for registered delegates for 28 days following the events. We see ABCD as the 'home' for specialist diabetes learning, so please do join us and contribute with your colleagues.

Make sure you also save the date of 11th January 2022 for our meeting to commemorate the centenary of the first administration of insulin into a human. ABCD has grand plans for this special event, which will be held in person at the Royal College of Physicians in London to celebrate the occasion.

The ABCD Diabetes Technology Network (DTN) continues to grow and thrive with even more valuable resources and is fast becoming the go-to place for everything you or your patients need to know about diabetes-related technology. The website now includes open access to the DTN Academy™ featuring a wide array of CPD-accredited education and the Virtual Consulting Learning zone, with some amazing tips and advice for healthcare professionals in introducing, learning and using diabetes technology. There is also a series of educational resources for people living with diabetes including flash glucose monitoring, continuous glucose monitoring, pumps and sensor-augmented pumps.

The *British Journal of Diabetes* is reassuringly going from strength to strength with a growing reputation for publishing high-quality research and reports as well as ABCD popular position statements. If you haven't read an issue recently I urge you to visit the website as I am sure you'll find many interesting articles relevant to improving knowledge and practice in specialist diabetes care (<https://bjd-abcd.com/index.php/bjd/index>).

In the last six months our academic sub-committee has been reinvigorated and we are delighted to announce that, in partnership with Diabetes Care Trust (DCT) charity, we will shortly be promoting a new research grant award scheme. Accompanied by new guidance and stringent procedures, the programme offers grants to new and aspiring diabetes researchers. Watch this space for more information. In addition, the ABCD audits continue at pace under the stewardship of Dr Bob Ryder and team. We urge anyone

who has not yet signed up to our nationwide audits to do so; find out more at <https://abcd.care/abcd-nationwide-audits>.

I would like to take this opportunity to thank all ABCD committee members, both past and present, for their time, dedication and spirit in supporting the development of our programmes and new resources. There is opportunity for ABCD to work with more international partners and I feel this potential should be seized.

As Chair of the ABCD committee, I would like to take this opportunity to thank all our corporate sponsors of both ABCD and DTN-UK without whom our programmes and supporting activities would not be possible. Sponsors include AstraZeneca, Lilly, Novo Nordisk Ltd, Abbott Laboratories Ltd, Roche Diabetes Care, Insulet International Ltd, Medtronic Ltd, Medtrum Ltd, ViCentra, Advanced Therapeutics (UK) Ltd, Air Liquide Healthcare Ltd, CamDiab and Dexcom. I urge you all to support us by visiting their stands when you come to our conference.

Finally, I wish you all a happy, healthy and fun summer and hope that you are able to spend time with friends and loved ones as lockdown continues to ease.

Dipesh Patel, ABCD Chair

From the desk of the News Editor, Umesh Dashora

JBDS News (Ketan Dhatariya)

- New guideline on the management of diabetes in patients with cancer will soon be online
- We are in the process of refreshing some of the older guidelines, so watch this space
- JBDS also now had a twitter feed @JBDSIP and a Facebook page www.facebook.com/JBDSIP

Results of Rowan Hillson Inpatient Safety Award 2021 award postponed

This JBDS-IP award for 2021 is postponed due to the COVID-19 second wave. The project is led by Umesh Dashora and Erwin Castro.

In view of the second wave and on the suggestion of Dr Rowan Hillson, the subject of the award will be modified to include the fantastic innovations that people have made during this pandemic. The title for the 2022 award will be 'The Rowan Hillson Inpatient Safety Award – The best interventions: Re-designing, rebuilding and maintaining safe inpatient diabetes care during COVID'. En-

tries are welcome from September with the last date in February 2022. Please prepare for a submission in September from your team.

RT-CGM and flash glucose monitoring not recognised by DVLA for G2 drivers with insulin-treated diabetes (Dinesh Nagi)

Flash glucose monitoring (FSL) is allowed for clinical use in a selected group of individuals with type 1 diabetes in the UK. In GB there are 1,428 drivers with type 1 diabetes who currently hold a Group 2 (lorry and bus) driving licence. The regulation to allow insulin-treated individuals with diabetes to drive Group 2 vehicles was allowed several years ago when the UK was an EU member. Group 2 drivers are required to have 3 months' worth of blood glucose readings when they see the independent assessor; this evidence must be recorded on a blood glucose monitor, through finger prick tests. As the use of technology is expanding, more and more drivers with type 1 diabetes are eligible for access to FSL and are using this to monitor their diabetes. However, these individuals are not being informed that FSL is not recognised for driving purposes for Group 2 licence holders. By law, Group 2 drivers must continue to finger prick test twice a day even when they do not drive. For those Group 2 drivers who use FSL, DVLA guidance recommends that these individuals must also continue to finger prick test glucose for driving purposes. In addition to this, some of these drivers are also being denied test strips by their GPs, unaware of the DVLA guidance. ABCD would like to urge specialist diabetes teams to ensure that this guidance is made clear to people who are being given access to FSL for monitoring purposes and primary care colleagues to ensure that an ample supply of test strips is being made available.

<https://abcd.care/announcement/rt-cgm-and-flash-glucose-monitoring-not-recognised-dvla-g2-drivers-insulin-treated>

ABCD COVID-19 Audit (Dinesh Nagi)

ABCD has undertaken a nationwide audit of people admitted to hospital with diabetes and COVID-19. This Audit is being conducted by a group of clinicians and researcher in the field of diabetes. Since February 2021, data collected from 3,542 patients with type 1 or type 2 diabetes and COVID-19 have been submitted by a total of 42 NHS centres around the UK. The data include outcomes to discharge or death for up

to 70 days from admission, reflecting the prolonged hospital course of many patients with severe COVID-19. Several interesting publications are planned to understand the impact of COVID-19 on diabetes and outcomes such as admission to ICU and factors associated with poor outcomes. ABCD would like to thank clinicians who have taken time out of their busy clinical schedule to contribute to this important nationwide initiative.

http://www.diabetologists-abcd.org.uk/Coronavirus/COVID-19_Diabetes_Nationwide_Audit.htm

Papers published around this audit are:

<https://www.bjd-abcd.com/index.php/bjd/article/view/741>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8106514/>

The first ABCD/DUK joint position statement on the use of SGLT-2 inhibitors in people with type 1 diabetes on SGLT-2 inhibitors

ABCD has produced updated guidance on the use of SGLT-2 inhibitors in people with type 1 diabetes, which is simultaneously published in *BJD* and *Diabetic Medicine*.

Dashora U, et al. Association of British Clinical Diabetologists (ABCD) and Diabetes UK joint position statement and recommendations on the use of sodium-glucose cotransporter inhibitors with insulin for treatment of type 1 diabetes (updated October 2020). *Diabet Med* 2021;**38**(2):e14458. <https://doi.org/10.1111/dme.14458>

National training programme to support people living with diabetes in care homes

Sanofi have partnered with EDEN (Leicester Diabetes) to deliver a national training programme called SANOFI CARES to support people living with diabetes in care homes. The online training and additional virtual mentoring support launched in April is available to registered and non-registered practitioners who look after people with diabetes in our care homes. Currently it is estimated that approximately 25% of all care home residents have diabetes and the data show that many people with diabetes in care homes suffer unnecessarily.

For further information see www.diabetesmatters.co.uk/sanoficare or email sanoficare@sanofi.com

CaReMe group produces guidance on SGLT-2 inhibitors and patient leaflet

A newly formed group by specialists from cardiac, renal and diabetes and primary care societies is working together to improve care of people with multiple co-morbidities. It has produced excellent guidance on heart failure and cardiovascular risk reduction for health-

care professionals who are not diabetes specialists along with leaflets for people with diabetes.

https://www.britishcardiosocietysociety.org/__data/assets/pdf_file/0021/21963/CaReMe_T2DM_CVD_2020.pdf
https://www.britishcardiosocietysociety.org/__data/assets/pdf_file/0014/23333/ABCD_A4_Leaflet_Final.pdf

From the desk of Rebecca Reeve (Sanofi)

Scientists and researchers to get an extra £250m this year

The Department for Business, Energy and Industrial Strategy has confirmed that UK scientists will receive additional public funding, taking total Government investment in R&D to £14.9bn in 2021–2022. As part of the Trade and Cooperation Agreement with the European Union, the UK will associate with Horizon Europe, which is expected to be 20% larger than the previous funding framework.

<https://www.gov.uk/government/news/250-million-additional-funding-to-boost-collaboration-and-protect-ongoing-research>

High risk, high reward research agency by 2022

To help the UK retain its position as a ‘global science superpower’, Secretary of State for

Business, Energy and Industrial Strategy Kwasi Kwarteng MP has announced the launch of ARIA, the Advanced Research and Invention Agency. Similar in underlying concept to the US DARPA, and backed by £800m, ARIA is intended to fund high risk, high reward research with a high tolerance for failure. ARIA is expected to be operational by 2022.

<https://www.gov.uk/government/news/uk-to-launch-new-research-agency-to-support-high-risk-high-reward-science>

UKHSA launched last week

The UK Health Security Agency (UKHSA) was launched last week with Dr Jenny Harries as its first Chief Executive. The Government states that the new agency will work to protect the country from future health threats and ensure the country can respond to pandemics quickly and at a greater scale.

<https://www.gov.uk/government/news/work-begins-for-uk-health-security-agency-to-protect-the-nation>

135 CCGs to become 106 CCGs

NHS Digital reports that 38 Clinical Commissioning Groups (CCGs) have conditional approval to merge into nine CCGs in April. The HSJ observes that there has been a surge in CCG mergers over the past 2 years – partly due to budget cuts and partly due to anticipated restructuring. Over one-third

of potential Integrated Care Systems are anticipated to contain more than one CCG in their territories in 2022.

<https://digital.nhs.uk/services/organisation-data-service/change-summary-reconfiguration-2021-ccg-mergers>
<https://www.hsj.co.uk/commissioning/number-of-ccgs-to-be-cut-by-a-fifth-next-month/7029613.article>

A new policy paper

The Government published its White Paper on Health and Care titled ‘*Integration and Innovation: Working together to improve health and social care for all*’, describing legislative plans for the Health and Social Care Bill expected to be introduced in Parliament in Summer 2021. In addition to giving the Secretary of State for Health and Social Care more powers to intervene in how NHS England operates, the White Paper proposes substantial legislative changes which aim to:

- Make permanent the innovations that COVID-19 has accelerated and encourage the system to improvise new and better ways of working.
- Integrate healthcare in England by enshrining Integrated Care Systems in law.
- Reduce bureaucracy and create flexibility.
- Improve NHS England accountability and enhance public confidence.

<https://www.gov.uk/government/publications/working-together-to-improve-health-and-social-care-for-all>

Interesting recent research (Umesh Dashora)

A rapid-fire collection (extract) of interesting recent developments in diabetes

Authors, Journal	Type of study	Main results
Quan <i>et al</i> , <i>Advances in Nutrition</i>	Systematic review and meta-analysis	Western diets may increase the risk of gestational diabetes A review of 21 prospective cohort studies with 191,589 participants showed the pooled risk ratio (RR) of Western dietary patterns as 1.52. Potatoes were not associated with an increased risk but animal meat (RR 1.3) and fast foods (1.75) were significantly associated with an increased risk of GDM. Red meat and processed red meat increased the risk more than either poultry or fish intake. Quan <i>et al</i> . Western dietary patterns, foods, and risk of gestational diabetes mellitus: a systematic review and meta-analysis of prospective cohort studies. <i>Adv Nutr</i> 2021 Feb 12:nmaa184. https://doi.org/10.1093/advances/nmaa184
Chuter <i>et al</i> , <i>Diabetic Medicine</i>	Systematic review and meta-analysis	Diagnostic accuracy of ankle-brachial pressure index The meta-analysis found a sensitivity of 0.60 but a specificity of 0.87, indicating limited effectiveness in diagnosing early peripheral artery disease. Chuter, <i>et al</i> . Estimating the diagnostic accuracy of the ankle-brachial pressure index for detecting peripheral arterial disease in people with diabetes: a systematic review and meta analysis. <i>Diabet Med</i> 2021;38(2):e14379. https://doi.org/10.1111/dme.14379
Papadopoulos <i>et al</i> , <i>medRxiv</i>	Systematic review and meta-analysis	Acute metabolic emergencies during COVID-19 In this review of 312 publications 71 metabolic emergencies were associated with COVID-19 including DKA (63%), EuDKA (8.5%), combined DKA/HHS (26.8%) and HHS (1.4%). The overall mortality was 32.4%. Severe COVID, coexisting DKA/HHS and AKI are key determinants or mortality. The issue of discontinuing SGLT-2 inhibitors needs to be studied further as there was negative association with AKI. Papadopoulos <i>et al</i> . Acute metabolic emergencies in diabetes and COVID-19: a systematic review and meta-analysis of case reports. <i>medRxiv</i> 2021:2021-01. https://doi.org/10.1101/2021.01.10.21249550

Authors, Journal	Type of study	Main results
Palmer <i>et al</i> , <i>Diabetologia</i>	Systematic review and meta-analysis	<p>GLP-1 RA and SGLT-2 inhibitors both improve cardiovascular and renal outcomes. SGLT-2 inhibitor improves heart failure and GLP-1 RA stroke</p> <p>In a review of 764 trials including 421,346 participants receiving SGLT-2 inhibitors or GLP-1 RA added to existing treatment, both classes reduced all-cause mortality, cardiovascular mortality, non-fatal MI and kidney failure. SGLT-2 inhibitors reduced mortality and admission to hospital for heart failure more than GLP-1 RA and GLP-1 RA reduced non-fatal stroke more than SGLT-2 inhibitors (which have no effect). SGLT-2 inhibitors cause genital infections (high certainty evidence) whereas GLP-1 RA cause GI side effects (low certainty). Low certainty evidence suggests weight loss with both classes of drugs. Little or no evidence was found on limb amputations, blindness, eye disease, neuropathic pain or health-related quality of life. SGLT-2 inhibitors led to 5–48 fewer deaths in 1000 patients over 5 years.</p> <p>Palmer, et al. Sodium-glucose cotransporter protein-2 (SGLT-2) inhibitors and glucagon-like peptide-1 (GLP-1) receptor agonists for type 2 diabetes: systematic review and network meta-analysis of randomised controlled trials. <i>BMJ</i> 2021;372:m4573. https://doi.org/10.1136/bmj.m4573</p>
Bae <i>et al</i> , <i>Heart</i>	Systematic review and meta-analysis	<p>Older patients with hypertension and diabetes are more predisposed to COVID-19 infection but younger patients may have more fatal outcome</p> <p>In this review of 51 studies and 48,317 patients with confirmed COVID-19 infections, the relative risk of developing severe disease or death was significantly higher in patients with risk factors for CVD (OR: hypertension 2.5, diabetes 2.25 and CVD 3.11). Younger patients had a lower prevalence of these diseases but the relative risk of fatal outcomes was higher than in older people.</p> <p>Bae, et al. Impact of cardiovascular disease and risk factors on fatal outcomes in patients with COVID-19 according to age: a systematic review and meta-analysis. <i>Heart</i> 2021;107(5):373–80. https://doi.org/10.1136/heartjnl-2020-317901</p>
Nanayakkara <i>et al</i> , <i>Diabetologia</i>	Systematic review	<p>Delaying the age at diagnosis of diabetes reduces risks</p> <p>In this study from 26 observational studies comprising 1,325,493 individuals from 30 countries, age at diabetes diagnosis was inversely associated with risk of all-cause mortality and microvascular and macrovascular disease. Each 1-year increase in age at diabetes diagnosis was associated with a 4%, 3% and 5% risk reduction in all-cause mortality, macrovascular disease and microvascular disease, respectively. adjusted for current age.</p> <p>Nanayakkara, et al. Impact of age at type 2 diabetes mellitus diagnosis on mortality and vascular complications: systematic review and meta-analyses. <i>Diabetologia</i> 2021;64:275–87. https://doi.org/10.1007/s00125-020-05319-w</p>
Færch <i>et al</i> , <i>Diabetologia</i>	RCT	<p>Dapagliflozin reduces glycaemic variability more than exercise and metformin</p> <p>In this 1-week RCT on 112 participants for 26 weeks compared with a control group there was a 17% reduction in the mean amplitude of glycaemic excursions determined using a continuous glucose monitoring system in the dapagliflozin group, 25.3% statistically non-significant reduction in the exercise group, but no change in the metformin group. The significance of these findings is uncertain.</p> <p>Færch, et al. The effects of dapagliflozin, metformin or exercise on glycaemic variability in overweight or obese individuals with prediabetes (the PRE-D Trial): a multi-arm, randomised, controlled trial. <i>Diabetologia</i> 2021;64:42–55. https://doi.org/10.1007/s00125-020-05306-1</p>
Sayour <i>et al</i> , <i>Diabetologia</i>	Meta-analysis	<p>SGLT-2 inhibitors reduce myocardial infarct size in animal studies</p> <p>In this meta-analysis of 16 comparisons of 224 animals, SGLT2 inhibitors significantly reduced infarct size (by 33%) compared with placebo when administered to an intact organ system but not to isolated heart. Chronic administration was superior to acute dosing. The beneficial effect was noted in animals with or without diabetes, but more in the former. The effect was true for rat, mice and porcine models.</p> <p>Sayour, et al. Sodium–glucose cotransporter 2 inhibitors reduce myocardial infarct size in preclinical animal models of myocardial ischaemia–reperfusion injury: a meta-analysis. <i>Diabetologia</i> 2021;64:737–48. https://doi.org/10.1007/s00125-020-05359-2</p>
Butalia <i>et al</i> , <i>Diabetologia</i>	Open-label pragmatic clinical trial	<p>Tech-enabled transition coordinator reduced loss to follow-up from 47% to 12%</p> <p>In the year following transfer to adult care from paediatrics to adult diabetes clinic, a tech-enabled transition coordinator reduced the loss to follow-up appointment at least once in the following year from 47.1% in the usual care group to 11.9% in the intervention group.</p> <p>Butalia, et al. Improved transition to adult care in youth with type 1 diabetes: a pragmatic clinical trial. <i>Diabetologia</i> 2021;64:758–66. https://doi.org/10.1007/s00125-020-05368-1</p>
Henriksen <i>et al</i> , <i>Diabetologia</i>	Self-estimated quality of life study	<p>Asymptomatic nocturnal hypoglycaemia in people with type 1 diabetes with impaired hypoglycaemia reported better quality of life</p> <p>EQ-5D VAS self-estimated quality of life score was higher in people with type 1 diabetes with impaired hypoglycaemia on the day after asymptomatic nocturnal hypoglycaemia (but not symptomatic) compared with non-hypoglycaemic nights vs no change in people with normal hypoglycaemic awareness. The effect increased with lower and longer low glucose. There was no effect on mood or self-estimated effectiveness at work on the following day.</p> <p>Henriksen, et al. Effects of continuous glucose monitor-recorded nocturnal hypoglycaemia on quality of life and mood during daily life in type 1 diabetes. <i>Diabetologia</i> 2021;64:903–13. https://doi.org/10.1007/s00125-020-05360-9</p>

Authors, Journal	Type of study	Main results
Chen <i>et al</i> , <i>Diabetes Care</i>	Retrospective case series study	Early-phase in-hospital glycaemic fluctuations have increased risk of ARDS with COVID-19 In this study, patients with higher mean glucose during their first week of hospitalisation were older, more likely to have comorbidity and abnormal laboratory markers, prolonged hospital stays, increased expenses and greater risk of severe pneumonia, ARDS and death. Compared with those with the lowest quartile of glycaemic fluctuation, those with the highest quartile of fluctuation magnitude had an increased risk of ARDS (HR 2.73). Chen L, et al. Association of early-phase in-hospital glycaemic fluctuation with mortality in adult patients with coronavirus disease 2019. <i>Diabetes Care</i> 2021;44(4):865–73. https://doi.org/10.2337/dc20-0780
Lee <i>et al</i> , <i>Diabetes Care</i>	Meta-analysis	Asian people have greater benefits in heart failure and cardiovascular mortality outcomes with SGLT2 inhibitors and MACE outcomes with GLP-1RA medications The hazard ratio (HR) for MACE outcomes for Asians vs white people was 0.81 vs 0.90. In the two SGLT-2 inhibitor trials in patients with heart failure and reduced ejection fraction, the CV death/HHF outcome HR in Asians was 0.60 vs 0.82 in whites. In six GLP-1RA trials the MACE outcome HR in Asians was 0.68 vs 0.87 in whites. Lee et al. Meta-analyses of results from randomized outcome trials comparing cardiovascular effects of SGLT2is and GLP-1RAs in Asian versus white patients with and without type 2 diabetes. <i>Diabetes Care</i> 2021 Mar 11:dc203007. https://doi.org/10.2337/dc20-3007
Bancks <i>et al</i> , <i>Diabetes Care</i>	Look AHEAD re-evaluation	Intensive lifestyle intervention (ILI) may be beneficial for some subgroups of people with type 2 diabetes but not all Subgroups with older age at diabetes onset, poor glycaemic control, severe obesity and younger age at diabetes onset were compared in this study. Randomisation to ILI was associated with increased risk for each cardiovascular outcome only among the poor-glucose-control subgroup (HR >1.32). Diabetes subgroup identification may stratify patients who would get benefit and avoid harm from ILI. Bancks, et al. Type 2 diabetes subgroups, risk for complications, and differential effects due to an intensive lifestyle intervention. <i>Diabetes Care</i> 2021 Mar 11:dc202372. https://doi.org/10.2337/dc20-2372
Kristófi <i>et al</i> , <i>Diabetes Care</i>	Observational study	Cardio-renal risks in people with type 1 diabetes can be as high as in type 2 diabetes People with type 1 diabetes are at the same high risk of CV disease as people with type 2 diabetes and at higher risk of CKD than people with type 2 diabetes. Age-adjusted event rate is higher for people with type 1 diabetes compared with people with type 2 diabetes for heart failure (up to 1.3-fold), MI (up to 1.8-fold) and stroke (up to 1.7-fold). CKD risk was up to 3 times higher in type 1 diabetes for all ages. All-cause death risk was up to 1.5 times higher in people with type 1 diabetes above 50 years of age with similar trend for CV death. Kristófi R, et al. Cardiovascular and renal disease burden in type 1 compared with type 2 diabetes: a two-country nationwide observational study. <i>Diabetes Care</i> 2021 Mar 2:dc202839. https://doi.org/10.2337/dc20-2839
Cahn <i>et al</i> , <i>Diabetes Care</i>	Analysis from DECLARE-TIMI 58	Dapagliflozin reduces the risk of HHF and adverse renal outcome in primary care population In this analysis of people in primary care with multiple risk factors, the results were similar to the benefits seen in people with atherosclerotic cardiovascular disease. The beneficial effect was entirely driven by a reduction in HHF by 36%. The effect was consistent across clinically relevant subgroups. Cahn A, et al. Cardiovascular, renal, and metabolic outcomes of dapagliflozin versus placebo in a primary cardiovascular prevention cohort: analyses from DECLARE-TIMI 58. <i>Diabetes Care</i> 2021 Mar 2:dc202492. https://doi.org/10.2337/dc20-2492
Shen <i>et al</i> , <i>Diabetes Care</i>	Retrospective exploratory study using CGMS	Time above range 9 mmol/L and time below range 4 mmol/L on flash monitoring was associated with poor outcome in COVID in-patients In this study the percentage of time spent above range (>9 mmol/L) and TBR (<4 mmol/L) but not mean sensor glucose on flash monitoring was significantly associated with poor outcome like the need for admission to intensive care unit, mechanical ventilation or morbidity with critical illness. People with high coefficient of variation of glucose also fared poorly. Shen, et al. Thresholds of glycemia and the outcomes of COVID-19 complicated with diabetes: a retrospective exploratory study using continuous glucose monitoring. <i>Diabetes Care</i> 2021;44(4):976–82. https://doi.org/10.2337/dc20-1448
Akiboye <i>et al</i> , <i>Diabetic Medicine</i>	Systematic review	Diabetes specialist nurse services reduce length of stay In this review of 10 eligible studies, median length of stay reduced by up to 3 days, bed occupancy by up to 47% and drug errors by up to 52% along with improved patient knowledge, higher patient satisfaction and improved glycaemic control after discharge with the diabetes specialist nurse intervention. Akiboye, et al. Impact of diabetes specialist nurses on inpatient care: a systematic review. <i>Diabet Med</i> 2021 Mar 30:e14573. https://doi.org/10.1111/dme.14573
Weissler <i>et al</i> , <i>Diabetic Medicine</i>	Post-hoc analysis of data from EXSCEL trial	What predicts major adverse limb events (MALE) in people with type 2 diabetes? In the EXSCEL trial 3.6% of people experienced MALE with a higher risk in people with peripheral vascular disease (HR 4.8), painful foot ulcer (HR 2.16), prior amputation (HR 2.0), current smoking (HR 2.0), insulin use (HR 1.86), CAD (HR 1.67) and male sex (HR 1.64). Cerebrovascular disease, former smoking, age, glycosylated haemoglobin, race and neuropathy were also significantly associated. Weissler, et al. Predicting major adverse limb events in individuals with type 2 diabetes: insights from the EXSCEL trial. <i>Diabet Med</i> 2021 Mar 10:e14552. https://doi.org/10.1111/dme.14552

Authors, Journal	Type of study	Main results
Wang <i>et al.</i> <i>Proceedings of National Academy of Sciences</i>	Animal study	Monoclonal antibody to glucagon receptor (Ab-4) promotes beta cell survival Durable and sustained improvement in glycaemia after exposure to monoclonal antibody to Ab-4 was noted in rodents with increase in insulin, C-peptide and 6.7-fold increase in beta cell mass at least partly driven by conversion of alpha cells to beta cells. Wang, et al. Glucagon blockade restores functional β -cell mass in type 1 diabetic mice and enhances function of human islets. <i>Proc Natl Acad Sci USA</i> 2021 Mar 2;118(9):e2022142118. https://doi.org/10.1073/pnas.2022142118
Smith <i>et al.</i> <i>Diabetic Medicine</i>	Crossover trial	Glucose excursion after a high fat, high protein diet can be better controlled with 125% preprandial insulin In this study, postprandial glucose excursions after a high fat, high protein diet were lower with 125% dose of insulin aspart compared with comparators. Replacement of aspart with regular insulin or splitting the dose was not beneficial. Smith, et al. For a high fat, high protein breakfast, preprandial administration of 125% of the insulin dose improves postprandial glycaemic excursions in people with type 1 diabetes using multiple daily injections: a cross-over trial. <i>Diabet Med</i> 2021 Jan 9:e14512. https://doi.org/10.1111/dme.14512
Silverii <i>et al.</i> <i>Diabetes, Obesity and Metabolism</i>	Meta-analysis of RCT	SGLT2 inhibitors are associated with 14% reduction in all-cause mortality In this meta-analysis of SGLT-2 inhibitors of 21 trials with a median duration of 104 weeks covering nearly 39,000 patients and reporting nearly 2,400 deaths, treatment with SGLT2 inhibitors was associated with a significant reduction in all-cause mortality (OR 0.86). Meta-regression analyses found a direct association of treatment effect only with the proportion of Asian participants enrolled and an inverse relationship with the proportion of Caucasians. Silverii, et al. Sodium-glucose co-transporter-2 inhibitors and all-cause mortality: a meta-analysis of randomized controlled trials. <i>Diabetes Obes Metab</i> 2021;23(4):1052–6. https://doi.org/10.1111/dom.14286
Leelarathna <i>et al.</i> <i>Diabetic Medicine</i>	Commentary	Hybrid closed-loop systems in 2021 Systems characterised by the combination of automated algorithm insulin delivery combined with mealtime manual boluses offer better glucose control and lower risk of hypoglycaemia. This paper compares the available systems like Medtronic 670G/780G with Guardian 3 sensors (7-day use and 2–4 calibrations a day), Tandem t:slim X2 Control IQ and CamAPS FX systems (both the latter systems need no calibration and still have 7-day use). The CamAPS system is available on Android app whereas the other two systems have the algorithm embedded in the insulin pump. All the systems were associated with 65–76% time in range (3.9–10 mmol/L) with low burden of hypoglycaemia. The CamAPS system is fully customisable and the only system licensed for use in pregnancy. Leelarathna, et al. Hybrid closed-loop therapy: where are we in 2021? <i>Diabetes Obes Metab</i> 2021;23(3):655–60. https://doi.org/10.1111/dom.14273



Follow us on twitter
@BJDVD_Editor



Join the LinkedIn group
<http://www.linkedin.com/groups/British-Journal-Diabetes-Vascular-Disease-8118305>

News editor: Dr Umesh Dashora
E-mail: news@bjd-abcd.com

<https://doi.org/10.15277/bjd.2021.304>

The ABCD News is not subject to peer review



This has been a really busy time for the DTN group with a number of projects on the go.

ACADEMY

We have been really pleased with the response to ACADEMY. For those who are not aware, this is a CPD-certified, ABCD-endorsed education programme for HCPs around diabetes technology. In total there are just over 25 hours of educational content over seven different courses ranging from virtual consultations, through basics of multiple daily injections (MDI), all the way to sensor augmented pumps. Since the launch at the end of November, we have had 17,600 views of the videos with over 775 hours of content watched and 297 courses completed. Through our collaboration with Diasend, we have the ability to view courses completed in different regions and have 3-monthly reporting meetings with NHS England. Our desire is that this becomes an integral part of training for SPRs coming through diabetes and endocrinology training, as well as for specialist nurses and dietitians looking to enhance their skills.

For those of you who are experienced, you can always add the DTN-ACADEMY certificates to your portfolio by just taking the assessments. Have a quick peek at the summary videos that capture key aspects of the topics, and do get in touch with any feedback on the courses.

A key desire of this project is to get a common theme running through teams, so that people with diabetes get a uniform message from their healthcare team.

To access the ACADEMY programme you will need to sign into Diasend using your individual log-in. If you don't have this, speak to your team Diasend administrator and activate your account. Don't worry if your clinic does not use Diasend – you can create a free ACADEMY account through Diasend if you need to.

Patient education videos

One of the unique elements of this project was that we negotiated with Glooko, who funded the project, to allow us to have all our educational content available free of charge to people with diabetes and their carers on the DTN website. One of the underlying ideas was that, if the HCPs and people with diabetes had the same information, they would be effectively speaking the same language, which should help them get the most from the technology to which they have access.

Educational videos on Freestyle Libre 2

Given the recent launch of the Freestyle Libre 2, the DTN committee has produced some guidance on how to set up the alarms. We have also filmed two videos on how to set up the alarms and how to use them, which will be available on the DTN website soon.

Pump choice videos

The choice of insulin pumps is now so wide that it can sometimes be challenging for HCPs as well as people with diabetes to look through the different options. Certainly, during these COVID times with virtual working, the ability to show people different pumps and explain the pros and cons of different systems is reduced. To try and support teams with this and help people with diabetes make their decision a little easier, we have filmed a series of short videos talking about how to choose a pump and highlighting key features of the different systems. Check out the DTN website and use this resource to signpost people who are deciding on which pump to use.

Dr Pratik Choudhary

Contact: pratik.choudhary@kcl.ac.uk

YDEF NEWS

EDUCATION • ADVOCACY • SUPPORT

The YDEF committee thoroughly enjoyed the recent DUKPC 2021 online and we are looking forward to what the rest of 2021 will now bring with the pandemic subsiding (hopefully for good!).

On behalf of the rest of the committee, I would like to thank our outgoing chair Najaf Haider for all his efforts, guidance and leadership during what has been a very turbulent year for YDEF and the NHS as a whole. We wish our new chair, Giulia Argentesi, the best of luck taking over the role for the next year.

We hope to begin hosting some courses face-to-face in the next year with provisional plans in place to run our highly commended Diabetes Technology course in the autumn. We also look forward to hosting our Northern European colleagues at the Northern European Young Diabetologists' meeting which we are hosting in May, potentially with some in-person content. Finally, we hope to run our YDEF day in-person, this year asynchronous with the Diabetes UK Professional Conference as a one-off. Watch this space for more information.

Virtual opportunities remain available. ABCD and Lilly have kindly supported the Diabetes Masterclass series which has been incredible with fantastic attendance. The Obesity course held its first of three webinars in the last few weeks and was very well received and over-subscribed.

We hope to keep developing these opportunities and welcome any suggestions. Furthermore, if anyone wishes to join the committee, we will be opening applications in the next few weeks. .

Dr Tim Robbins
on behalf of YDEF Committee
University Hospitals Coventry &
Warwickshire NHS Trust, UK
Contact: dtrobbins@gmail.com

YDEF is dedicated to all diabetes and endocrine trainees and is open for new members to register on our website. Take advantage of our regular newsletters and up-to-date advertising of a wide variety of courses and meetings to complement your training.

As always, we are continuously looking to develop and propagate our specialty so do not hesitate to contact us if you have any suggestions or questions!

www.youngdiabetologists.org.uk
[@youngdiab](https://twitter.com/youngdiab) on twitter