Innovating Type 1 Diabetes education (BERTIE)

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Diabetes team, University Hospitals Dorset

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- NICE recommends all people with type 1 diabetes are offered a QISMET accredited structured education course within the first year of diagnosis. We know uptake is poor for a multitude of reasons and provision is patchy across the UK. Access is very limited for people wanting a refresher course for this lifelong condition with pressure on clinical teams to deliver face to face courses.
- Bertie has been delivered in Dorset since 2000 with published clinical outcomes. In 2016 Royal Bournemouth Hospital diabetes team launched the first QISMET accredited online structured education program for people with type 1 www.bertieonline.org.uk

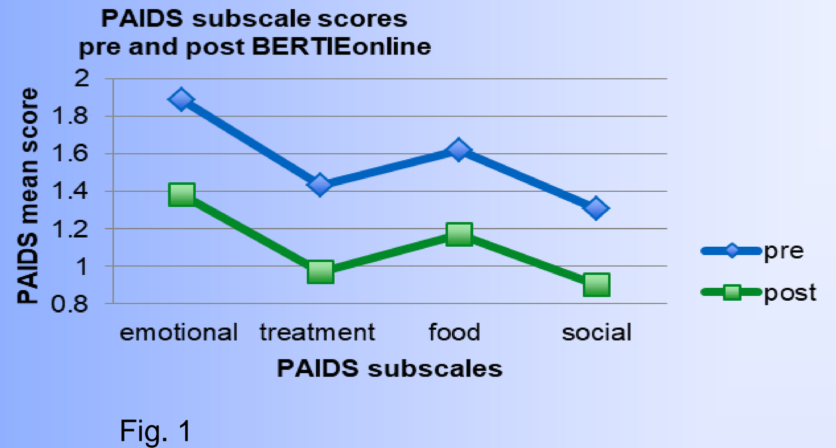
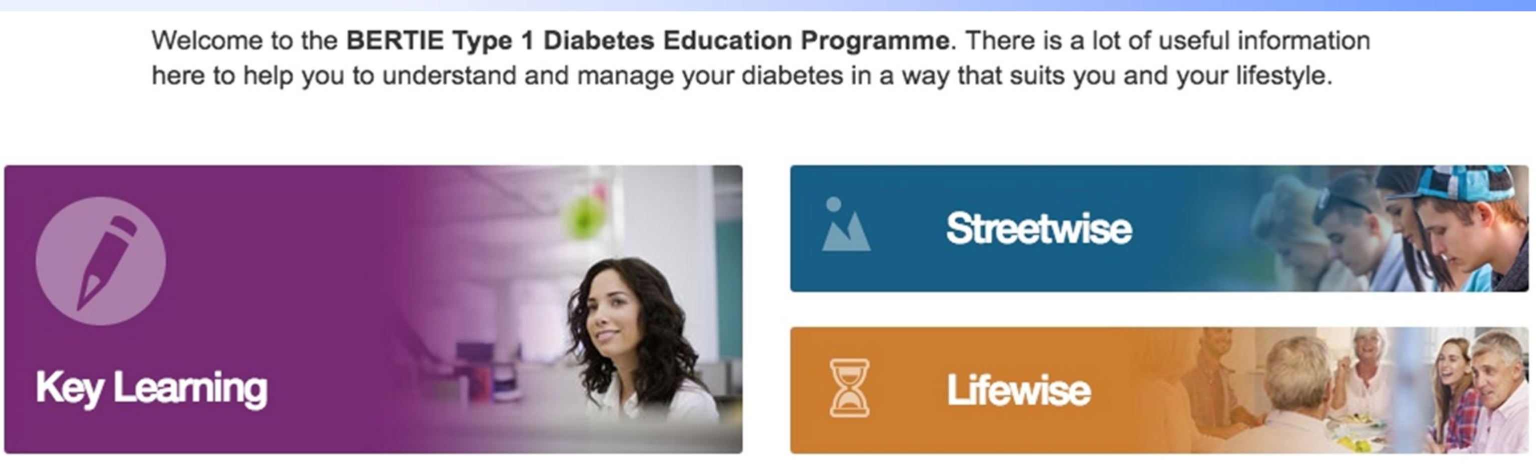


Fig. 1



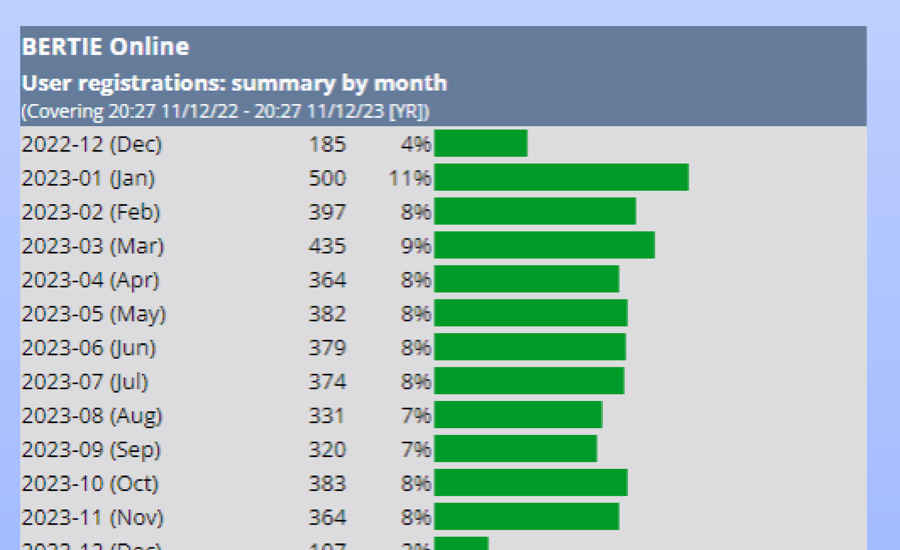
- Data of 1 year outcomes were published at Diabetes UK in 2018 showing a significant reduction in psychological distress measures after completing the course online. This was paired with data showing that throughout the 7 years of running the course the “Psychology” subsection was the highest accessed (Fig. 1)

- 2022-23 Mean monthly **new** user registrations 384 (331-500) (Fig. 2)

Bertieonline was awarded the 2017 Learning Technologies award Best UK public and non-profit sector award and awarded Highly Commended in the 2018 QiC awards
It is endorsed by JDRF, IDF, DUK and NHSE

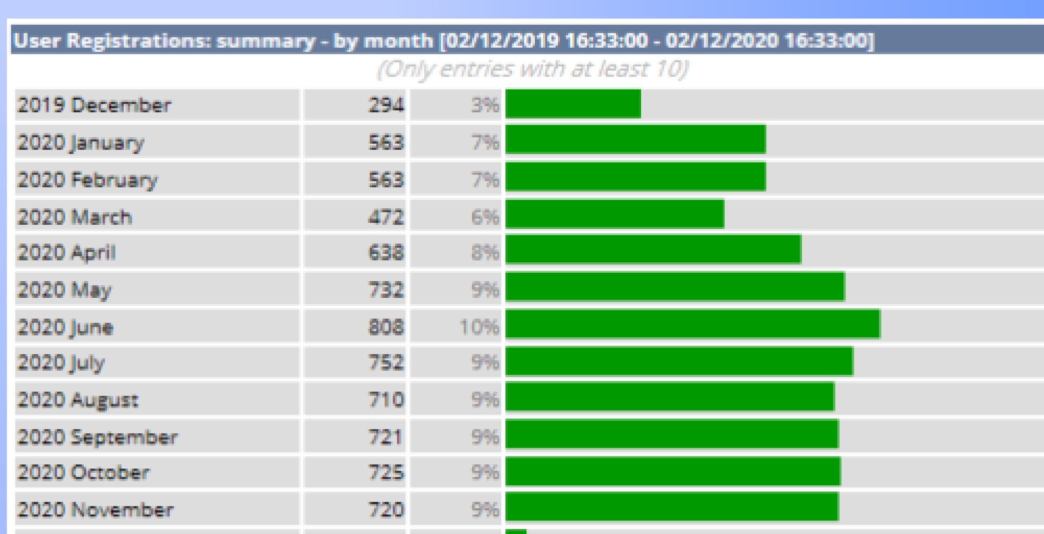
In 2022 Bertieonline was redeveloped. Working alongside diabetes healthcare professionals and experts by lived experience the website was re-designed and improved with the addition of more support around emotional wellbeing and psychological health, more interactive tools and videos and patient experience modules. It was relaunched as www.bertiediabetes.com in January 2024

During the covid pandemic people with diabetes were considered to be at increased risk and were advised to maintain strict glucose levels at a time when access to their regular health care teams was severely disrupted. Monthly Bertieonline attendance hugely increased during this time to support people living with T1D.
2022 Mean monthly user registrations 673



BERTIE Online
User registrations: summary by month
(Covering 20:27 11/12/22 - 20:27 11/12/23 [YR])

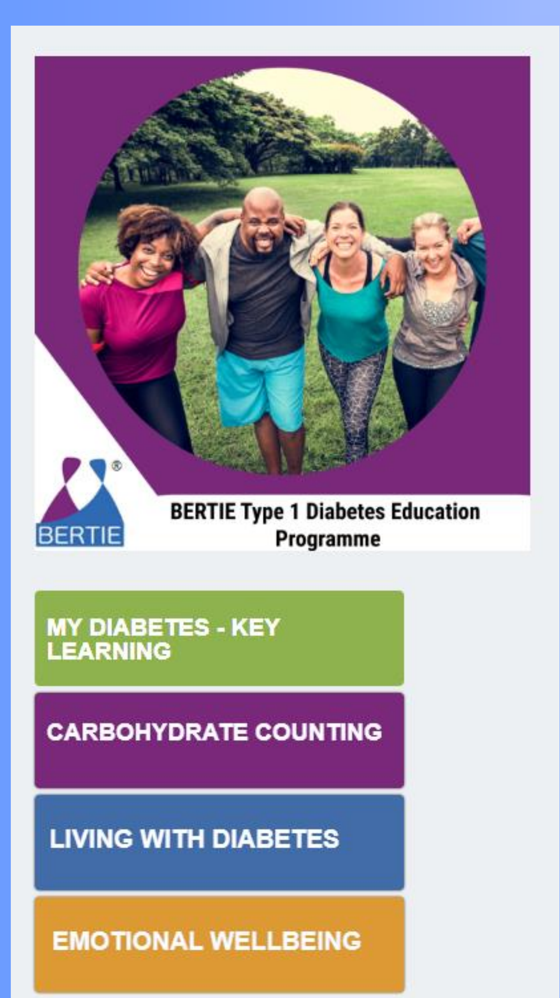
Month	Registrations	%
2022-12 (Dec)	185	4%
2023-01 (Jan)	500	11%
2023-02 (Feb)	397	8%
2023-03 (Mar)	435	9%
2023-04 (Apr)	364	8%
2023-05 (May)	382	8%
2023-06 (Jun)	379	8%
2023-07 (Jul)	374	8%
2023-08 (Aug)	331	7%
2023-09 (Sep)	320	7%
2023-10 (Oct)	383	8%
2023-11 (Nov)	364	8%
2023-12 (Dec)	107	2%

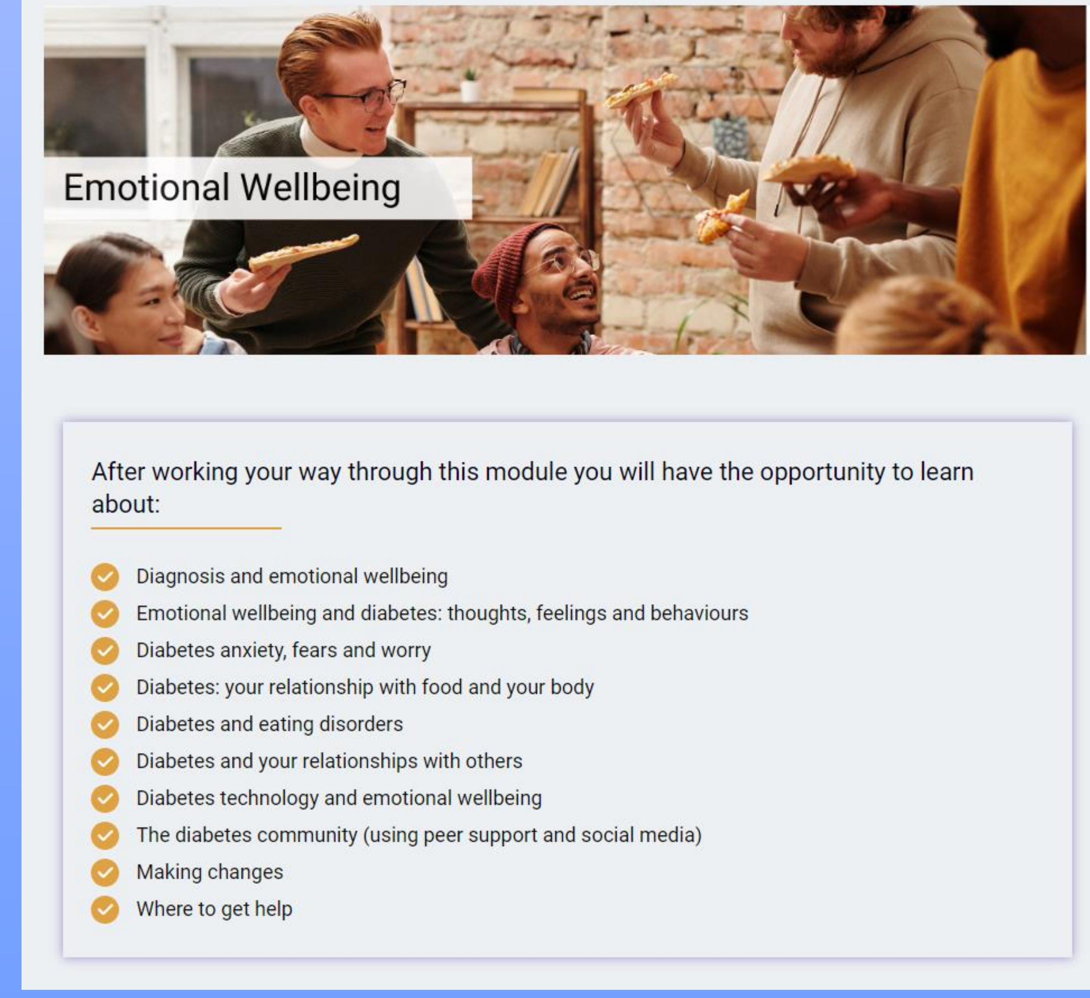


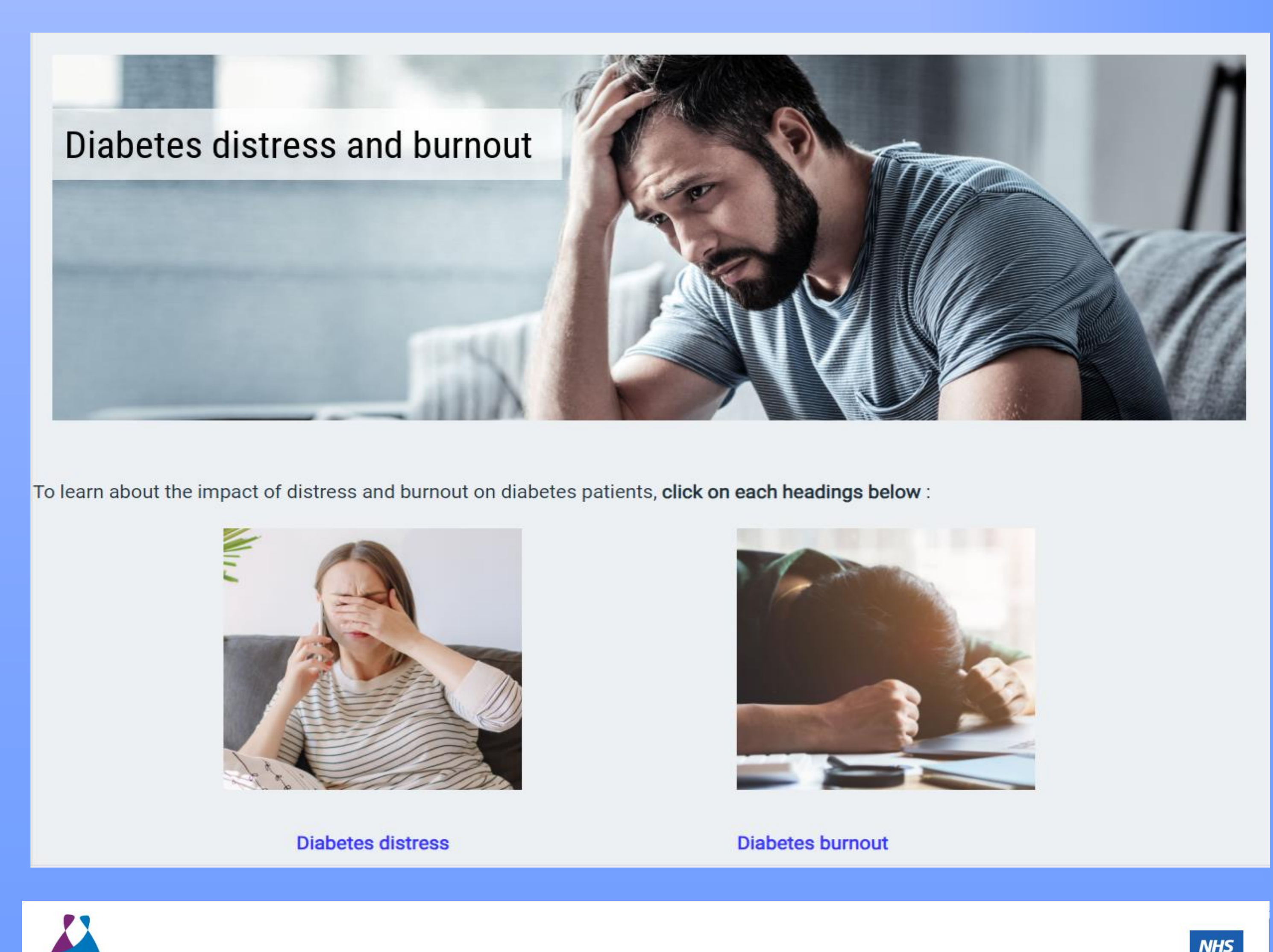
User Registrations: summary - by month [02/12/2019 16:33:00 - 02/12/2020 16:33:00]
(Only entries with at least 10)

Month	Registrations	%
2019 December	294	3%
2020 January	563	7%
2020 February	563	7%
2020 March	472	6%
2020 April	638	8%
2020 May	732	9%
2020 June	808	10%
2020 July	752	9%
2020 August	710	9%
2020 September	721	9%
2020 October	725	9%
2020 November	720	9%
2020 December	48	0%

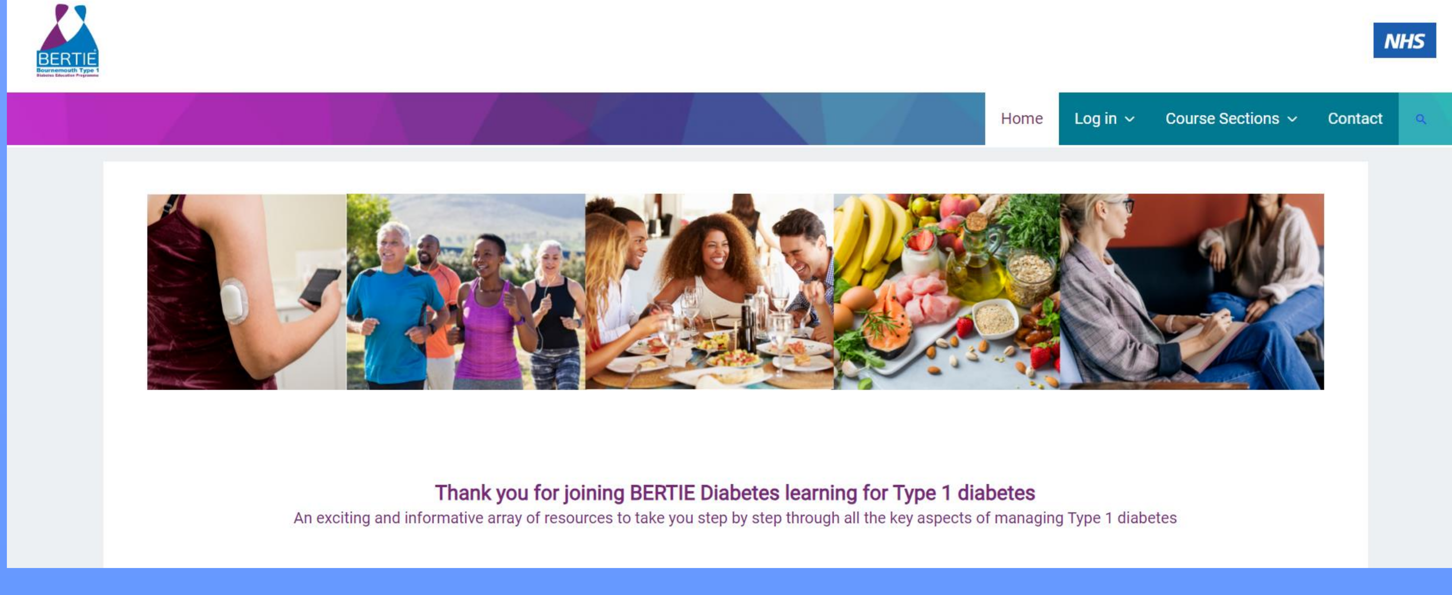
Fig.2 Monthly new user registrations 2022-23 (left) during covid 2020-21 (right)







Bertie and Bertiediabetes remain the only combined face to face and freely available QISMET accredited structured education courses for people with type 1 in the UK and as far as we are aware internationally.
We continue to develop the program with a view to developing different language versions and hybrid virtual courses.
Bertiediabetes is now hosted on MyDiabetesMyWay which is funded and supported by NHSE



HYDRATE TO BETTER HEALTH

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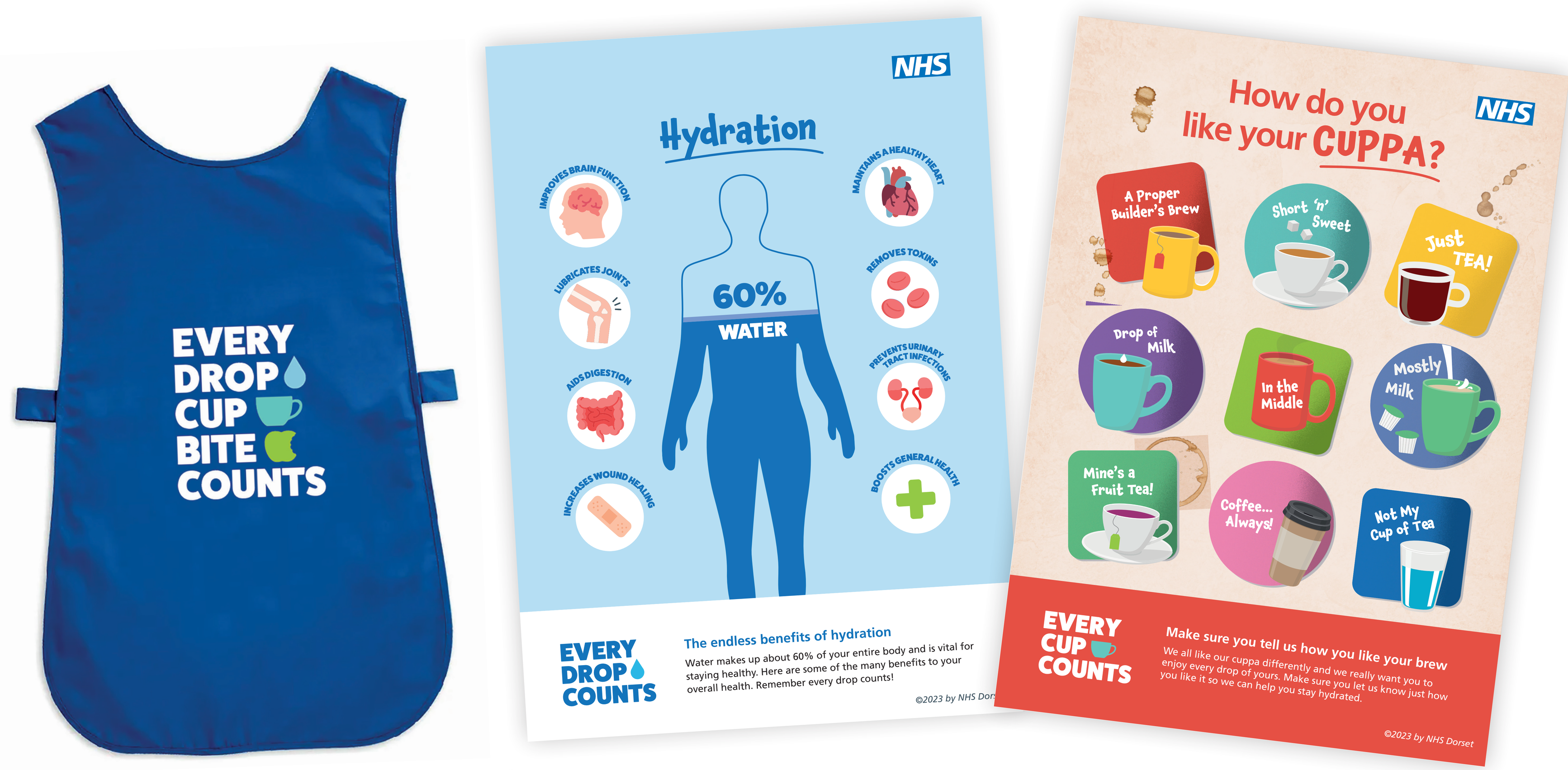
INTRODUCTION

This project aimed to apply quality improvement methodology to improve understanding/awareness of hydration benefits and dehydration risks for people aged 65+ by the end of June 2023. This was particularly pivotal in supporting the delivery of the AMR National Action Plan, working in collaboration and partnership with colleagues across the integrated care system in Dorset.
We co-designed an educational hydration resource, which had a consequential impact on reducing the number of falls and urinary tract infections (UTIs), therefore reducing the need for antimicrobials such as antibiotics.

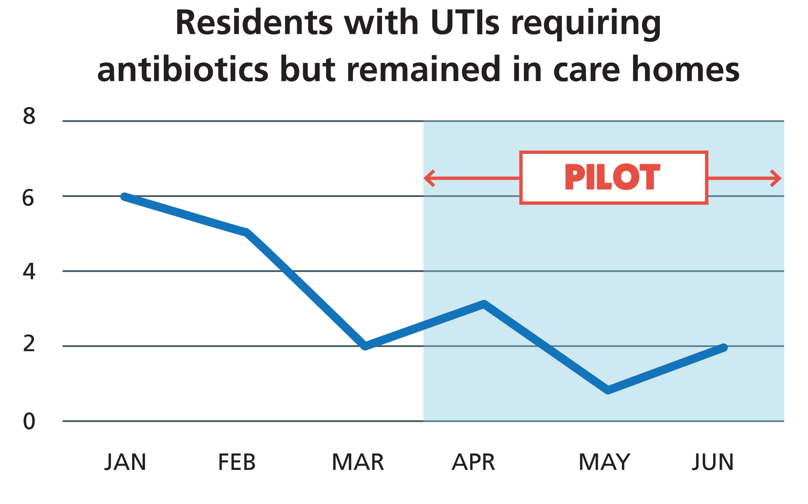


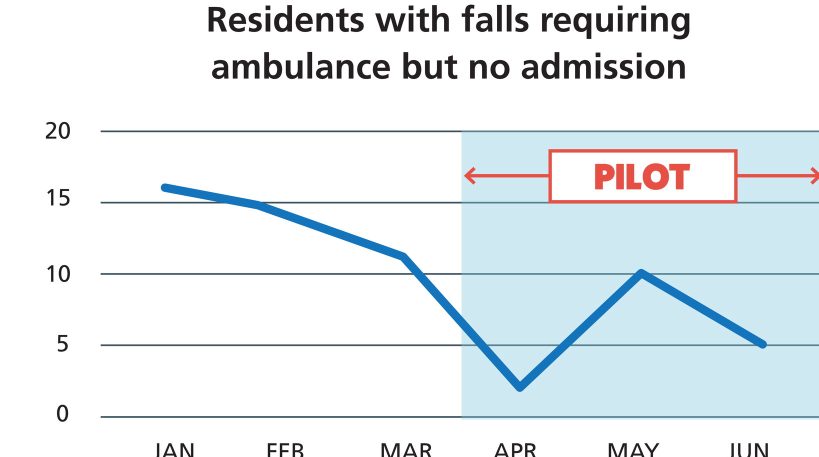
METHODS

Application of a 'human-centred method' and co-design techniques were used to co-produce educational hydration resources in the form of patient/resident leaflets, staff/carers leaflets, posters, banners, and hydration tabards to provide informative hydration messages. The pilot took place from April - June 2023 in two older people's wards in a large acute trust and across three care homes in Dorset.

Pre and post questionnaires were used in partnership with patients, residents, staff, and carers to co-design and co-produce resources at the earliest stage to promote their engagement. The data gathered was related to UTIs and falls in the form of safety crosses before and during the pilot to evidence the impact of interventions.

RESULTS





The data continues to be collected however, we have already identified a significant reduction in falls and UTIs. The data collected for UTIs requiring antibiotics for residents who remained in care homes reduced by **46%** when compared to three months prior to the pilot. We identified a **59%** reduction in the number of residents who had fallen and required ambulance attendance, where hospital admission was not required.

For residents with a diagnosis of dementia, staff observed a significant drop in sundowning behaviour and a general uplift in their mood. An unintended positive outcome for residents was also observed in activities such as pushing the hydration trolleys and using individual blenders, which promoted their participation and involvement.

FEEDBACK

"It is a lot of fun to see the hydration trolley come around, as there are so many different things to have. The girls (staff) make it fun for the residents. P is usually very quiet, but I have noticed that as she is drinking more, she is talking more. It's so lovely to talk to her again. She loves the ice lollies and smoothies."
Bill – Husband of resident

"I really enjoy all the fresh fruits I can choose from to go into a milkshake, and I had a coke float. It took me right back to my younger days!"
Geoff – Resident

"Staff have really got on board with hydration, and the hydration tabard means they are not disturbed, and they really concentrate on what each resident would like. We have been able to add this to our care plans to make them more person-centred around drinks and snacks. We have also seen a drop in falls and infections, and residents seem much happier and healthier in themselves. It's amazing what extra fluid can achieve."
Rebecca – Head of Care

CONCLUSION

The co-design of the hydration resources was achieved through collaboration with our system partners, recognising their expertise and commitment to improving the health and well-being of the people of Dorset.

The pilot project enabled fresh conversations around a variety of hydration options. Patients and residents felt excited to experiment with different activities, such as making fruit kebabs, blending smoothies, and eating ice-lollies.

Due to the success of the pilot we are planning to expand to community hospitals, primary care networks, acute trusts, and additional care homes across Dorset.

CONTACT

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Evaluation of integrated diabetes and mental health care for type 1 diabetes and disordered eating (T1DE): the ComPASSION service

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Dr Marina Zafeiri[1], Ella Ascar[1], Dr Carla Figueiredo[2], Dr Helen Partridge[1]
[1]University Hospitals Dorset NHS Trust
[2]Dorset HealthCare University NHS Trust

Aims and Objectives

- Patients with T1DM have significant higher risk of developing eating disorders (T1DE). This risk is heightened by meticulous attention to diet and lifestyle, necessitated by diabetes management.
- Support for people with T1DE is hindered by silo working with physical and mental health teams
- Dorset won a bid to become one of 2 NHSE funded pilot sites to evaluate an integrated physical and mental health service for people with T1DE
- An independent evaluation of the pilot was conducted to assess effectiveness, acceptability and cost benefit analysis of the 1 year pilot

Methods

- Multi-site hub and spoke model in Bournemouth, Dorchester and Portsmouth Inpatient and outpatient care provided

Patient cohort, baseline and outcome analysis

- 23 patients with T1DM enrolled in the service between March 2019 and October 2020
- Baseline HbA1c and follow-up at least 12 months later taken
- Wilcoxon signed-ranked test used to assess significance of HbA1c fluctuations

Interviews and surveys

- 8 semi-structured staff interviews & 3 patient interviews conducted
- Online surveys with clinical staff and patients

Questionnaires used:

- Diabetes Eating Problem Survey (DEPS-R)
- Eating Disorder Examination questionnaire (EDE-Q)
- Eating Disorder Quality of Life (EDQOL)
- Problem Areas in Diabetes (PAID)
- Generalised Anxiety Disorder Assessment (GAD-7)
- Patient Health Questionnaire 9 (PHQ-9)
- Work and Social Adjustment Scale (WSAS)

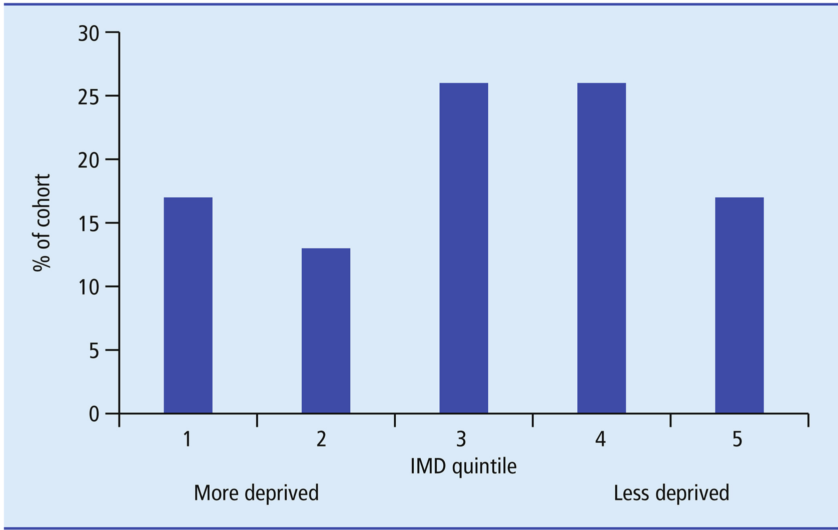

Figure 1. Distribution of T1DE patients by index of multiple deprivation (IMD) quintile (n=23)

Results

- Median HbA1c reduction for 11 patients with follow up ≥12 months was 31mmol/mol ($p=0.01$)
- For 8 further patients follow-up was 3-11 months
- Median estimated HbA1c change for all 19 patients was 9mmol/mol ($p<0.01$)

Patient experience

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The Type 1 Diabetes/Eating Disorder team have helped me manage my insulin and/or my eating	33%	40%	7%	13%	7%
The Type 1 Diabetes/Eating Disorder team have helped me manage my feelings and emotions around body image	20%	33%	13%	20%	13%
The Type 1 Diabetes/Eating Disorder team have helped me manage my feelings and emotions around food	47%	33%	7%	7%	7%
Overall I was satisfied with the treatment I received	53%	20%	13%	7%	7%

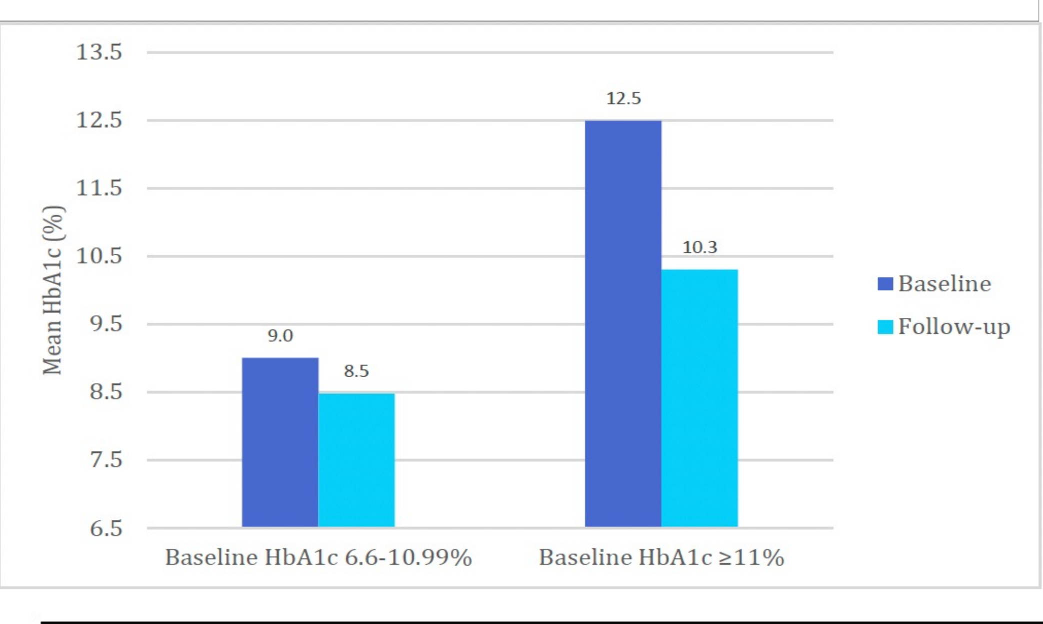

Figure 2. Those with the highest HbA1c at enrolment had the greatest benefit in terms of HbA1c reduction

	n	Mean score at baseline	Mean score at follow up	Mean change from baseline	Standard deviation of change
DEPS-R	6	32.83	29.33	-3.50	19.08
EDE-Q global	6	4.57	3.74	-0.83	0.80
EDQOL	5	2.24	1.54	-0.69	0.42
PAID	6	54.15	36.04	-18.11	19.37
GAD-7	8	14.88	12.38	-2.50	3.94
PHQ-9	8	18.38	12.25	-6.13	5.62
WSAS	4	18.50	16.00	-2.50	5.72

Table 1. All patient reported psychological and social markers were significantly elevated at the start of the pilot and all showed a marked reduction after 1 year of therapy

Conclusion & Main points

- We present the findings of an independent evaluation of the ComPASSION service in Wessex, providing integrated diabetes and mental health care for T1DE
- Almost three-fifths of patients had HbA_{1c} ≥97mmol/mol at initial assessment
- The median change in HbA_{1c} for patients with at least 12 months' follow-up was a reduction of 31mmol/mol
- In survey responses, 80% of patients said they would be likely or extremely likely to recommend the service to a friend or family member
- 95% of staff survey respondents reported increased confidence in supporting T1DE patients

References

Wild, D., Kerr, M., Figueiredo, C. and Partridge, H. (2023), Evaluation of integrated diabetes and mental health care for type 1 diabetes and disordered eating (T1DE): the ComPASSION service. Pract Diab, 40: 19-23. https://doi.org/10.1002/pdi.2445

Declarations

- Funding for ComPASSION and further evaluation was provided by NHSE The ComPASSION service was de-commissioned after 4 years due to financial constraints within the NHS when pilot NHSE funding ceased

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NHS Dorset HealthCare University NHS Foundation Trust

Workforce Debrief Tool

Staff Wellbeing

THE EVENT:

Staff within health care and other public facing services are continuously exposed to events that can impact the physical and emotional wellbeing of a team or individual. Their recovery can be both short and long term, having a potential detrimental effect on the individual and the service.

CONFIDENCE & SAFETY INCREASED

THE SUPPORT:

The Post Incident Care Opportunity or PICO is a debrief tool, designed to support care planning, event reflection and aims to reduce the symptoms of staff trauma in the event of an incident within the workplace.
Whilst maintaining wellbeing and supporting retention of staff in a role that they are passionate about.

"I don't feel so alone"
Mental Health Support Worker 2023.

THE PILOT:

Piloted within Inpatient CAMHS in 2023 and used in community services and on a 1:1 basis, the PICO tool has been valuable to staffs recovery post incident/event. Providing a team approach to recovery and reflection. Staff have communicated that they felt safe to share their experiences and that the process is not only valuable but person centered.

THE PROJECT :

The PICO project has taken time to ensure that it meets the need of those who require post incident support. Moving from a "hot debrief" ethos to a structured and staff led tool has been beneficial to those who take part. We have learnt that with a supportive debrief, staff feel confident in their duties and are able less likely to require time away from their role. With support from the QI team, Wellbeing lead and members of the occupational health team, the implementation of a PICO has enabled staff to be more confident within the workplace and structure is added to patient care. Moving forward we would like to ensure that all services have the opportunity to experience a PICO debrief and support the design of staff development to maximise the teams PICO experience. Luke Webb, Nurse and Performance Coach along with Dorset Healthcare are happy with the current pilot and look forward to rolling it out in the near future.

SICKNESS & TRAUMA DECREASED

"This has opened my eyes to how much aftercare is required when an incident takes place"
Healthcare Leader 2023.

EFFECTIVE TASK MANAGEMENT

For more information please contact
Luke.webb2@nhs.net
Transitions Team Lead CAMHS

NIHR | Clinical Research Network Wessex

University of Southampton

Thinking Outside The Box

Stepping Outside the Clinical Setting to Promote Research & Boost Recruitment

HIS-UK is a programme designed to improve young men's experiences of condoms by making the use of condoms and lubricants more enjoyable.

This research study looks at the effectiveness and cost effectiveness of HIS-UK delivered by two intervention delivery models (face-to-face (proHIS) and digital (eHIS)) to reduce test positivity of Chlamydia among young men aged 16-25 years.

The study was designed to be conducted in a clinical setting. In our Trust, the study recruited from the two sexual health clinics, in Bournemouth & Weymouth.

Due to COVID-19 the number of patients attending clinics in person was reduced which in turn reduced our recruitment opportunities.

We worked hard with the clinics to ensure eligible patients were offered the study, but despite our best efforts recruitment remained low.

We started to think of other ways of reaching the young people who might be interested and eligible for the study.

We were put in touch with a local Army Camp at Bovington who were really interested and supportive of our research. They agreed to give us a slot in their induction week where we presented the HIS UK study to the new Army recruits.

We had a lot of interest from the cohorts with many of them signing-up for the study straight away.

Our outreach outside of the clinic began in May 2022 and has since significantly boosted our recruitment.

In the last 3 months, we have recruited on average 8 participants per month, compared to the average of 1.5 per month in the previous 8 months.

We have also now achieved our recruitment target, with 4 months to spare.

Any questions email: dhc.researchdevelopment@nhs.net

'Reinventing the wheel': Creating a Hypermobility Specific Virtual Pain Management Program

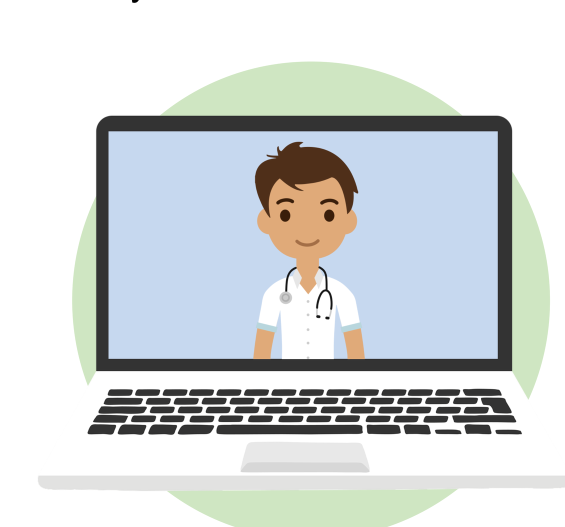
Sarah Sturman Chartered Physiotherapist, Meherzin Das Clinical Lead, Rhiana Jessop Lead for Rural Long Term Conditions Service NHSTT, + Lived Experience, Fran Harber Assistant Psychologist, Alister Coleman Assistant Psychologist.

Once upon a time our group PMPs helped people to manage their pain.

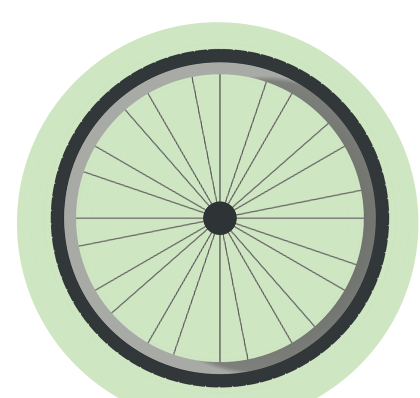
But then came COVID, we all stayed in our homes, and things were no longer the same!

The quiet time gave us space to reflect.

And technology helped us find new ways to connect.



Building on what we already had, it was time to reinvent the wheel…



A **PMP just for hypermobile** folk to help them manage the pain they feel.

Our pilot complete, our **outcomes are good**, but there's always room to grow.

We're here to share what we've learnt on the way, the challenges, and what we now know..

Introduction

- There is much debate around the nature of Hypermobility Spectrum Disorder (HSD) and specifically hEDS (Hypermobile Ehlers Danlos Syndrome).
- The relationship between connective tissue anomalies and nociception has not been confirmed, yet symptoms in this group create widespread challenges to wellbeing and function.
- We combined our virtual pain management program format with the 'Strengthen Your Hypermobile Core' rehab program to create a new bespoke program to meet the specific needs of this patient group.

Literature

Outcomes

- **3 cohorts = 29 participants** (female), average age 45.03 years (range 22-66 yrs) completed the programme.
- **Significant improvements** reported in average Pain Interference Scale (PIS) score ($p=0.014$) and Pain Self-Efficacy (PSEQ) ($p=0.002$).
- Bristol Impact of Hypermobility showed a trend towards **reduced impact** but did not reach statistical significance.
- **High levels of satisfaction** reported with the group.

Program format and content

Week	SYHC theme	Group conversation
0	**Familiarisation**	Group welcome, familiarisation to members of the group, IT platform and programme. **Peer support – Expert By Experience.**
1	**UNWIND** (befriending body)	Sharing the journey – Life with HSD/hEDS: Understanding the physiology, challenges, losses and possibilities.
2	**RELAX**	Understanding pain and the role of medicines – moving towards acceptance. **Expert talk – Pharmacist**
3	**BREATH**	Compassion principles – body and mind.
4	**PROPRIOCEPTION**	Felt sense of self – connecting with feelings.
5	**STABILITY**	Window of tolerance.
6	**BALANCE**	Activity management. **Expert talk – OT**
7	**INTEGRATION**	Integrating skills and knowledge towards valued goals.
8	**Future planning**	Setback management and community support.

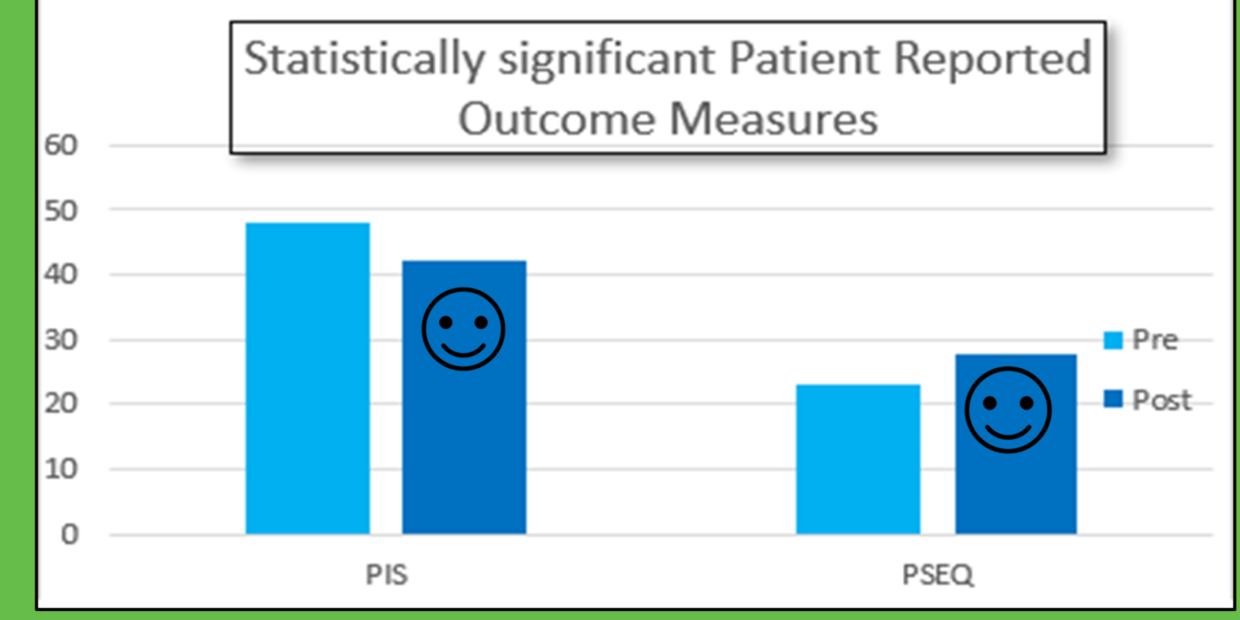
Follow up 6 weeks post group. Acknowledging successes and challenges. Empowering ongoing supported self-management.

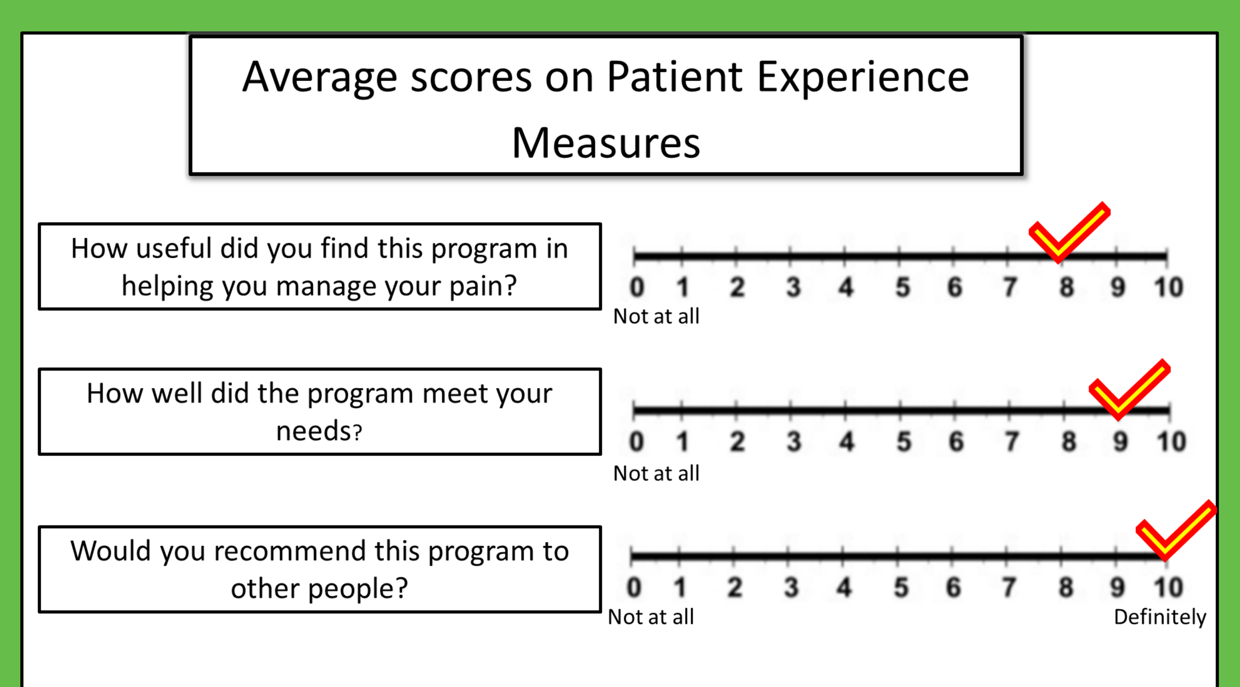
Guidelines for Pain Management Programmes for Adults

Jeannie Di Bon, MA, PMA-CPT "Strengthen Your Hypermobile Core–A Home Exercise Approach for EDS, HSD, and Hypermobility"

The Zebra Survival Guide

8-week virtual programme: 2.5 hours per week, facilitated consistently by one physiotherapist and one psychologist, with additional expert speakers.





Reflections and next steps

Reflections

- This programme led to **improvements in pain interference**, **self-efficacy and** demonstrated **high levels of patient satisfaction.**
- Generalisation of results is limited by small sample size and lack of control group.
- This new service has led to increased **awareness of HSD in our local healthcare networks, and an increase in referrals.**
- 'Square peg, round hole': identifying specific needs for this cohort.

Next steps

- Audit content and delivery to increase accessibility for **neurodiverse population.**
- Inclusion of expert talk from **rheumatologist**.
- Creation of self-directed video series.

Inpatient Management of Type 1 Disordered Eating (T1DE) on the Specialist Eating Disorder Unit

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Dorset HealthCare NHS Foundati

Dr Helen Partridge
Consultant Diabetologist
University Hospitals Dorset

Dr Sarah Brewster
Consultant Diabetes & Endocrine
Southern Health NHS Foundation Trust

Ms Claire Pinder
Dietitian
Dorset Eating Disorder Service,
Dorset HealthCare NHS Foundation Trust

Dr Carla Figueiredo
Consultant Psychiatrist
Dorset Eating Disorder Service,
Dorset HealthCare NHS Foundation Trust

NHS University Hospitals Dorset NHS Foundation Trust

NHS Dorset HealthCare University NHS Foundation Trust

Introduction

Type 1 disordered eating (T1DE) refers to a range of presentations in those with a diagnosis of type 1 diabetes that uses one or more of a range of behaviours to control their weight. These behaviours include omission of insulin, restriction of food, over exercise, self-induced vomiting and abuse of laxatives or diuretics. More than one of these compensatory behaviours may be present. The most dangerous of these is insulin restriction, which puts patients at higher risk of the short and long term complications of diabetes.

In 2018, NHS England funded a multi-specialty pilot project, the ComPASSION Project, which sought to establish patient pathways and protocols to best care for patients with T1DE, plus educational material for patients and staff in both mental and physical healthcare settings. The project was a collaborative effort between Royal Bournemouth Hospital and the Dorset Eating Disorder Service in the Wessex region[1]. This poster will focus on our experience of treating patients with T1DE on Kimmeridge Court, the inpatient ward of the Dorset Eating Disorder Service.

Proposed diagnostic criteria for T1DE

People with type 1 diabetes who present **with all 3 criteria:**

1. Disturbance in the way in which one's body weight or shape is experienced or intense fear of gaining weight or of becoming overweight.

2. Recurrent inappropriate direct or indirect* restriction of Insulin (and/or other compensatory behaviour**) in order to prevent weight gain.

*Indirect restriction of insulin refers to reduced insulin need/use due to significant carbohydrate restriction.

** Dietary restriction, self-induced vomiting, laxative use, excessive exercise.

3. Person must present with a degree of insulin restriction, eating or compensatory behaviours that cause at least one of the following:

- Harm to health.
- Clinically significant Diabetes Distress.
- Impairment in areas of functioning.

Summary

T1DE is a disorder which health services are increasingly recognising as a serious illness with significant associated risks. Limited evidence exists to guide the management of these patients. We have piloted a staged approach with the aim of gradually supporting the physical recovery of the patient, whilst helping to develop their autonomy to administer their insulin and overcome their eating disorder cognitions and behaviours.

From our experience, these patients cannot be treated without the close collaboration of diabetes and eating disorder services. We believe this model of multi-specialist working can be taken forward to other areas of medicine.

We recently published our recommendations (college-report-cr233---annexe-3.pdf (rcpsych.ac.uk) and are about to publish our outcomes from over 4 years experience as a model for in-patient management of T1DE.

The process from pre-admission to discharge

Pre-admission preparation

- **Patient**
  It is vital to agree a care plan prior to admission. Describing the process, setting a mutually agreed time limit and giving the person with diabetes time to think about the plan is important, as is giving time for them to ask questions and make suggestions.
  Starting the person with diabetes on either flash glucose monitoring or continuous glucose monitoring is advisable if they are not already using this technology.

- **Unit Staff**
  Asking Registered Mental Health Nurses (RMNs) to manage a complex medical condition where the management plan may change frequently is a huge challenge. Teaching sessions with Diabetes Specialist Nurses (DSNs) are critical prior to admission, so that the RMNs are comfortable in monitoring for potential diabetes related complications during treatment which may or may not require medical hospitalisation. Teaching sessions should also include discussion around the sensitive use of language and terminology.

- **Medication**
  The unit needs to ensure that both insulin and a stock of consumables are available. This may mean liaising with the patient's General Practitioner who regularly prescribes for the patient. It may be necessary to purchase equipment from the local pharmacy which may need to be ordered in advance (Testing strips, needles etc.). Appropriate refrigeration for insulin also needs to be considered.

Management during admission

Physical health risks associated with T1DE are typically related to the acute and chronic effects of insulin omission by the individual, the re-introduction of insulin during treatment, the management of hypoglycaemia, starvation and any alternative compensatory behaviours.

Mental health risks include harm to self or others, self-neglect, vulnerability and healthcare disengagement. Suicide is over-represented in patients with eating disorders[2] so staff must be mindful of this, as patients have access to a lethal means of suicide by insulin overdose.

Standard care of those with type 1 diabetes encourages blood glucose readings of between 4-10mmol/L both before and after meals, with the recommendation that at least 70% of readings should fall within this range[3]. This is achieved through provision of background insulin, which is *always* required even when a person with diabetes is not eating, alongside provision of rapid acting insulin which is required when carbohydrates are consumed.

For those with T1DE, insulin omission is a significant issue. **'Normal' blood glucose targets should be temporarily relaxed** and a gradual, personalised insulin re-introduction care plan should be drawn up with a discussion around speed of insulin increase. Initial doses of insulin are not intended to return the blood glucose levels back to 'normal,' but to switch off the production of ketones and therefore reduce further weight-loss and the risk of diabetic ketoacidosis (DKA).

A **step-wise approach** is recommended to **allow time for psychological adjustment** and also to **reduce the risk of treatment related complications** e.g. electrolyte shifts, treatment induced retinopathy and neuropathy which can occur if blood glucose levels are reduced rapidly[4]. With time, the aim is to progressively increase insulin doses to achieve the recommended targets, which may be achieved in some cases beyond the point of discharge from the inpatient unit.

Where total energy or carbohydrate intake has been restricted, establishing a **half portion refeeding meal plan alongside a small starting dose of insulin** would be considered safe. Refeeding vitamins as per national guidance are recommended[5]. The monitoring of electrolytes, particularly during the first week of re-feeding as an inpatient, is extremely important. Refeeding bloods (including renal function, magnesium and phosphate) were checked on day 0, 2 and 5 of the 14 day refeeding protocol. Local guidance for correcting blood levels if abnormal electrolytes are identified should be followed.

An insulin plan for when the patient is physically unwell, known as **'sick day rules'**, and contact details for the diabetes team and local out of hours support should be well documented in the care plan. Special attention must be paid to the risk of insulin oedema, pseudo-hypoglycaemia (symptoms of hypoglycaemia felt at higher blood glucose levels) and the emergence of alternative compensatory behaviours as insulin doses are slowly increased.

Re-insulinisation and improvement in physical health can sometimes be associated with a deterioration in mental health, making regular emotional and psychological support an integral part of all care plans.

Discharge

A multi specialist **Discharge Planning Meeting** should be arranged to agree a safe discharge plan, taking into account both the physical and mental health needs when transferring care back into the community. A stepdown in care initially with **day leave from the inpatient ward,** to a **Day Service** following discharge may be appropriate. **Follow-up sessions** with the Dietitian, Diabetes Team and Eating Disorder Practitioner should be in place prior to discharge. **Supportive phone calls** in the first few days following discharge can aid transition into the community and may moderate the immediate risks.

The Multi-Specialty Multi-Disciplinary Team

All members of the multi-disciplinary team involved in the care of someone with T1DE should have an understanding of both specialist areas- diabetes and eating disorders. People living with diabetes are experts in their own self-management and have highlighted that it is difficult to engage with healthcare professionals who are not well versed on the condition. The same is true in terms of eating disorders and understanding the cognitions and firmly held beliefs which drive their behaviours.

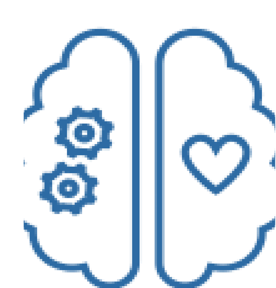
The Consultant Diabetologist
The role of the consultant diabetologist is to work closely with the other members of the multi-disciplinary team to oversee the re-introduction of insulin and offer support with the monitoring of the individual's physical health. With the use of continuous glucose monitoring, the consultant diabetologist can review glucose profiles remotely, see the impact of treatment changes and offer advice accordingly. Being part of fortnightly ward rounds helps the person with T1DE appreciate that their diabetes is as important as their mental health in their journey towards recovery. Having two senior clinicians present can be both reassuring and validating. It reinforces the seriousness of the condition, but can also re-assure the individual that all aspects of their care are being considered.

The Diabetes Specialist Nurse
The DSN can be in regular contact with the team and the person with T1DE to address practical issues with the delivery of the re-insulinisation care plan. We found it useful having a DSN present on shifts where insulin being given for a week at least, to support the dosing and administration of insulin by the unit staff.

The Dietitian
The role of the dietitian is to manage refeeding, to formulate the inpatient meal plan and to help the person with diabetes to establish a normalised pattern of eating. Additional work may focus on supporting the patient in tolerating changes in weight and shape, providing strategies such as food management to challenge previously excluded foods and education around the person's energy requirements for weight restoration.

The Consultant Psychiatrist
The consultant psychiatrist leads on risk management and the treatment of comorbid psychiatric illnesses. They support the nursing team to create safe care plans to help patients manage anorexic thoughts and behaviours that may be present. They are also in a position to consider the use of the Mental Health Act.

The Registered Mental Health Nurse
The RMN is responsible for delivery of the care plan and supporting the patient emotionally, as they challenge their fear of weight gain. It can be helpful to consider a staged approach in order to support the person to move forward with re-engaging with taking their insulin and with eating and drinking. This may involve staff initially undertaking blood glucose monitoring, ketone testing, preparing and observing insulin administration and food preparation with the patient gradually taking on these responsibilities over time.



The Psychologist
Weekly support and debriefing meetings facilitated by the psychologist may be valuable for staff that may feel out of their depth. Developing a formulation to guide therapy and to enable understanding of behaviours and emotions is invaluable in the in-patient setting. Areas of focus include the feelings of shame and embarrassment that individuals often experience. Psychological therapy may help address diabetes distress, which we common saw in our cohort of people with T1DE.

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