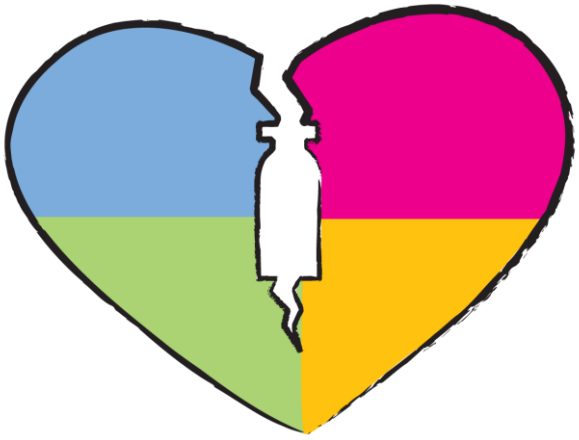

RECOMMENDATIONS AND ADVICE FOR THE HOSPITAL INPATIENT CARE OF SOMEONE WITH TYPE 1 DIABETES AND AN EATING DISORDER

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INTRODUCTION

If an individual suffering from ED-DMT1 (Eating Disorder-Diabetes Mellitus Type 1, a term which- encapsulates any kind of eating disorder entwined with type 1-Diabetes) and/or including Diabulimia (insulin omission) reaches a point of acute danger it may be deemed that an inpatient admission is required. Under best practice specialist units that solely treat type one diabetics with eating disorders would be widely available, but unfortunately with the NHS already stretched thin this is not the case and will not become so anytime in the near future. Owing to this, DWED aims to help facilitate the process by offering the following recommendations for both health care professionals and for our members (who can if they chose to, print off this document to then pass onto their clinicians.) Evidence to support our points is provided by way of the experiences encountered by DWED members, including that of the 3 voices included in last month's specialist content podcasts. We also refer to two past clinical studies that were centred on this subject.

PRIOR TO AN INPATIENT ADMISSION:

- Early intervention of a patient with type 1 diabetes and an eating disorder can be crucial. This is because the risks of complications including fatality are imminent if a sufferer is withholding insulin and starving their cells of oxygen as well as nutrients**.** This recommendation is made by Journal of Psychosomatic Research 55, 2003 [hereon referred as source A] after clinical studies*: "The timing of admission is critical to the success of the therapy. Also, the longer the treatment is delayed, the more severe the complications of the diabetes will be. Therefore, it is important that the patients be treated in as timely a manner as possible."*
- There should always be complete openness and clarity around training and expertise regarding type 1 diabetes by inpatient staff, OR the lack of such. Health care professionals and any member a of the unit staff should be urged to admit if they are not fully clued up on type 1 diabetes and to listen to those that are, INCLUDING the patient. There should be an understanding that a patient can be mentally ill but still the experts of their own condition. Ultimately, a defensive them versus me mentality is easily brought on by lack of trust in the team and their knowledge.
- Owing to the above, Source A suggests: "*On the day of admission, the patient is encouraged to decide the initial caloric intake with the understanding that she should be able to and will be expected to eat it all. Similarly, the initial dose of insulin injection is decided in consultation with the patient."*
- The patient's diabetes team should always be on board and ideally in close consultation with the admission hospital beforehand. The use of an advocate/friend or family member to interact on their behalf if the patient cannot comprehend decisions should be considered. Integrated care is a key theme found in the 2009 study "Inpatient Management of Eating Disorders in Type 1 Diabetes" published in Diabetes Spectrum Volume 22, Number 3 [source B] which reads*: "A treatment team composed of staff with specialties in both eating disorders and diabetes care who communicate on a regular basis is crucial to the care of ED-DMT1 patients. This team is usually composed of specialists from diabetes and eating disorders departments, including an endocrinologist; certified diabetes educators, including a registered nurse and a registered dietician; a primary care physician; a psychiatrist; a therapist; and a care manager. Members of the team should thoroughly understand both diagnoses." (Pg.1.)*
- Particular areas that may require specialist training for an eating disorder unit treating a type 1 diabetic are glucotoxicity (further damage to the beta cells caused by prolonged hyperglycaemia), insulin resistance (as a result of gluotoxicity, the absorption of insulin is impaired) and diabetic refeeding [see NICE guidelines on refeeding, 2006 edition], typified by several types of Oedema, including the critical Cerebral Oedema. Often there is a fundamental lack of understanding regarding what insulin is and what it does, that it has to be flexible and control is never absolute and often erratic. Many external and internal factors are involved in blood sugar level changes beyond simple

intake and outtake. The aforementioned study stresses that *"ED-DMT1 patients who intentionally withhold insulin will usually present with hyperglycemia, dehydration, electrolyte imbalances, and DKA. The medical care of these conditions calls for careful fluid, electrolyte, and insulin management."*

- If an eating disorder unit feels they are not fully able to provide medical stability for a diabetic patient it is paramount that this is divulged. In such cases the use of a general medical hospital admission prior to that of an eating disorder unit may be required as the safest option. Source B stresses that a facility should be able to offer the "*necessary array of general medical, specialty medical, psychological, nutritional, and emergency services."* It goes on to rationalise that *"any one or a combination of these services may be needed to care for these patients safely. Some of the more specialized services differentiate ED-DMT1 patients from other eating-disordered patients. Without the resources in place to meet any of this population's potential needs, the patients should not be accepted into the facility for treatment."*

DURING THE ADMISSION PERIOD:

- DWED have found that Diabulimia or ED-MT1 is routinely being incorrectly treated as a standard eating disorder. Most typically this can involve someone of normal body weight being placed on an anorexic diet. Putting someone with diabulimia into a ward which primarily treats anorexics can quite easily lead to them picking up additional unhealthy behaviours and ideas. This is discussed at length in podcast 2 of our interview recordings. A patient with ED-DMT1 should be treated as an individual and with a separate condition that is not too complex but does require unique attention from typical anorexia or bulimia nervosa.
- There MUST be close contact between the ED unit and a patient's current diabetes nurse and endocrinology team throughout any admission is encouraged. Preferably this should be in addition to any other specifically required services such as those provided for sufferers of personality disorders or other medical or psychological conditions, for example celiac disease or obsessive-compulsive disorder. If not physically possible this could perhaps be arranged by way of technological resources. This is a theme that arose from all 3 of our podcast interviews.
- It has been suggested by specialists that the administration of insulin and undertaking of blood glucose testing and monitoring should at first be taken away from the patient if it is decided that they lack the mental capacity to undertake these tasks themselves. In light of this it should be agreed that patients should not be put into a position whereby they need to remind staff of these duties which may be extremely difficult for them to do so. This issue is explored during podcast 1.
- From our experience and professional input it appears most logical that insulin be re-introduced on a regime agreed by the Diabetes Team. This is not just to respect the fact that a type 1 diabetic patient is likely to be fearful of accepting more insulin but to reduce the risk of complications. It has been proven that if insulin is taken on board too quickly when omission has been a prior issue then factors such as retinopathy or neuropathy can flair up and cause permanent damage.
- Source B reads: *"Initially, the aim should be toward modest blood glucose control with a gradual move toward tighter control. In most cases, the care team will assume responsibility for the diabetes care and gradually have patients resume responsibility as they demonstrate the ability and willingness to do so."*
- Also from source B and in support of the above point is the following: *"ED-DMT1 patients have withheld insulin for prolonged periods of time and have lived in a moderate to severe hyperglycemic state. They may become very susceptible and symptomatic with decreases in their serum glucose levels, even if in the normal range. Symptomatic 'relative hypoglycemia' may be very scary for them, and sustained anxiety is not helpful for their diabetes management. Gradual and consistent improvement in control will help to alleviate these fears and recruit their trust and cooperation in the process."*

- DWED members often express the opinion that sufficient psychological support should be provided to a patient throughout their admission whenever possible. They have said that this should not just address concerns relating to food but also acknowledge and understand the fear that many sufferers of ED-DMT1 will struggle with during the re-introduction of insulin.
- We have also heard that access to adequate water during rehydration during and after a patient has high blood sugar levels is crucial. In such cases care should be SPECIFIC and take into account that such water is not being held in the body like it would in a typical anorexic patient and so ward rules regarding water consumption should be reconsidered. The failure to understand this by EDU staff is expressed by interviewees in podcasts 1 and 3 who described distress and extreme thirst resulting from water being withheld from them.
- There should always be space and time available for a patient to be able to discuss what has gone well and also what has gone not so well after time out. In podcast 3 we hear of how our interviewee felt they hard to cover any slips up so to not be told off or penalised. This is generally applicable for all eating disorder inpatient care but particularly important in a diabetic patient as the danger of relapse is so pertinent and time out is crucial in taking back control of self-care. From source A: *"Although the patient often suffers set backs, becoming unstable and/or having failures, including binge eating, these experiences are very good practical learning opportunities that help the patients face and overcome their problems. The therapist does not allow the patient to escape from problems, but helps her attain a deep understanding and coaches her as to how to overcome them."*

PREPARING FOR DISCHARGE AT THE END OF AN ADMISSION:

- A staggered introduction of responsibility should be considered as a patient with ED-DMT1 is allowed to begin administering their own insulin and checking of blood sugar levels. We know from our members that going from all to nothing with regards to control on discharge can be hugely disastrous as the patient has had no time to prepare or learn 'normal' diabetic routine. This is discussed in podcast 2 as the interviewee describes how they were "left to their own devices" and this meant they had no new coping skills when it came to adjusting without the supervision of a medical team.
- Adequate follow up treatment should be discussed and agreed upon during HCP's and the patient on discharge from an eating disorder unit. This might be in the way of day-patient or outpatient services but should also involve close interaction with the diabetes team and continued correspondence between the two.

REFERENCES

Souce A: An integrated inpatient therapy for type 1 diabetic females with bulimia nervosa A 3-year follow-up study Masato Takiia,*, Yasuko Uchigatab , Gen Komakia , Takehiro Nozakia , Hiromi Kawaia , Yasuhiko Iwamotob , Chiharu Kuboa a Department of Psychosomatic Medicine, Graduate School of Medical Sciences, Kyushu University, 3-1-1 Maidashi, Higashi-ku, Fukuoka 812-8582, Japan b The Diabetes Center, Tokyo Women's Medical University School of Medicine, Tokyo, Japan Received 15 May 2001; accepted 24 September 2002

Source B: 2 Inpatient Management of Eating Disorders in Type 1 Diabetes, Diabetes Spectrum Volume 22, Number 3, 2009 *Ovidio Bermudez, MD, Heather Gallivan, PsyD, Joel Jahraus, MD, Julie Lesser, MD, Marcia Meier, RN, CDE, and Christopher Parkin, MS I*