Royal Hospital for Children, Glasgow & CAMHS

Low Weight Eating Disorder Pathway

Greater Glasgow and Clyde Joint Pathway for Acutely Medically Unwell Children and Adolescents with Low Weight Eating Disorders up until the age of 16 years.

CAMHS & RHC

October 2018

This document includes all the back ground details for the RHC and CAMHS pathway for medically unstable young people with low weight eating disorders. From this point on within this document the RHC and CAMHS pathway for medically unstable young people with low weight eating disorders, will be shortened to "the pathway". In addition young people or patients referred to are only those less than 16 years.

Table of Contents.

Introduction

Pathway Aims

The pathway aims:

- to identify young people with eating disorders who require admission to the Royal Hospital for Children (RHC) and
- physically stabilise those who are admitted
- to enable them to be safely discharged to the community for treatment to continue within the Child and Adolescent Mental Health Service (CAMHS).

To enable stabilisation, essential 2 approaches are required:

- Paediatric - to physically manage and stabilise the patient and
- Psychiatric - to manage the eating disorder behaviours to allow for the process of medical stabilisation.

Young people who go through the pathway are most likely to be newly diagnosed, therefore starting on their treatment journey.

Patient profile

There are approximately 40 low weight eating disorder patients treated in Greater Glasgow and Clyde (GCC) CAMHS annually. From 2010-2014 at assessment in CAMHS the patients profile at assessment was as follows

- mean age 14 years 9 months,
- mean weight for height 77%, median 2nd centile for BMI,
- 34% have a co morbid presentation
- 55% were from intact families.

Outcomes are good with 80 % of patients ≤ 90% weight for height by 12 months of treatment (intend to treat analysis). It is anticipated that less than 5 patients annually will meet the risk assessment framework (Royal College of Psychiatry 2012), and require an admission to the RHC.

Treatment

In GGC the treatment with the best research evidence, Family Based Treatment (FBT) (Lock, J. et al 2010) is the first line treatment offered to families with adolescents with anorexia nervosa in the outpatient setting. FBT is a treatment where the family is viewed as an important resource for the treatment of their child and they play a large part in their child's recovery. It is therefore important that during the admission to RHC, families are supported and included as much as possible with their child's treatment as part of adherence to FBT principles during their inpatient stay and setting the scene for their ongoing and important role in their child's recovery following discharge. (Royal College of Psychiatrists 2012).

Historic Context

Historically there was no such joined up approach and medically unstable young people were admitted to psychiatric wards, where long admissions are typical. It is well established that children and young people with anorexia nervosa should be treated as out patients (National Institute for Clinical Excellence (NICE) 2004) . Gowers et al (2007) in a RCT of in and out patient treatment found: no advantage to inpatient treatment over out patient treatment, that out patient treatment failures did badly on transfer to inpatients and suggested that lengthy inpatient stays may exacerbate anorexia nervosa.

Pathway Process and those involved.

A collaborative approach with GGC CAMHS, liaison psychiatry and RHC paediatrics began in November 2013, with the first meeting. Three work streams were identified, culminating in the completion of the pathway work and the commencement of its implementation in January 2016.
Clinicians involved included: Paediatrics, Liaison psychiatry and CAMHS.

Paediatrics: The Clinical Director of Acute Paediatrics, Paediatric Consultants specialists in Acute Medical , Gastroenterology, Lead Nurse Medical Paediatrics and Senior charge nurse, Dietetic Manager, Highly Specialist Paediatric Dietician.

Liaison psychiatry: Consultant Child and Adolescent Psychiatrists, Nurse Specialist and Nurse Therapists.

Child and Adolescent Mental Health Service(CAMHS): Clinical lead of eating disorder service (Connect-eating disorders), lead CAMHS dietetics, Community Consultant child and adolescent psychiatrist, associate specialist inpatient psychiatry, lead CAMHS nurse and Home intensive service lead.

Clinical teams involved in the care of young people admitted to RHC

The teams involved in the patients care during an admission are summarised below, including their role in the patients care during the admission, the key team contact and key team phone number.

Paediatrics

Clinicians based at RHC, led by the responsible Paediatric consultant (the on call consultant at the point of the patient's admission) for medical care of patients. Key contact: Dr Hilary Pearce, Acute Medical Consultant Paediatrician.

Initial Phone contact for referral is with the on call Clinical Decision Unit (CDU) Consultant at RHC ontel:0141 451 4678 (4670 CDU extension)

Liaison Psychiatry.

Inpatient clinicians based at RHC, responsible for overseeing the psychiatric care of these patients during their admission.

Key contacts: Dr Elaine Lockhart, Dr Gracia Mwimba, Dr Ruairidh McKay and Martin Donnelly (RMN) onTel: 0141 451 6529

Child and adolescent Mental Health Services (CAMHS)

Connect- eating disorders (eating disorders service)

Specialist eating disorders team working across tier 3 and 4, responsible for supporting psychiatric care in the RHC and in particular supporting the parents/carers during the admission.

Key Contact: Charlotte Oakley (Clinical Lead) Tel: 0141 277 7450

Dietetics

Patients admitted are likely to be known to Connect-ed specialist eating disorder Dietitian prior to admission. The first point of contact will be the Connect-ed Dietitian who will liaise with RHC Dietetics and it will be clearly documented who will hold responsibility for dietetic care during the admission. Dietitians can be contacted Mon-Friday 9-5pm. Weekends/Public Holidays RHC Dietitian is available on call between 9-12.30pm.

Key contacts: Connect-ed Jacqueline McConnell / Christina Yuen 0141 2777407 or 07814706897, RHC Dietitian Vicky Law 0141 2010000 page 8288

Intensive Community and Home based CAMHS (IC&HC)

Community based team, responsible for coordinating and participating in the psychiatric nursing care during the admission. Key Contact Jaclyn Watt (Nurse Therapist)

IC&HC contact Jaclyn MarshTel: 0141 2010213

Community CAMHS team

Tier 3 community treatment team, is where the young person will be case co-ordinated whilst in the community The team are responsible for their care before and after admission. All patients have a minimum of a case co-ordinator and a Consultant Child and Adolescent Psychiatrist.

There are 8 teams across GGC. Key contacts will vary. Contact Connect-eating disorders above as required.

PATHWAY SUMMARY

1. Young people are referred from Primary Care to Community CAMHS. Waiting lists are under 18 weeks and eating disorder patients are seen as priority patients who are often seen within 1 week.

2. If at assessment stage, the eating disorder patient is assessed as being at risk, as per the Junior MARSIPAN risk assessment

framework, by their consultant psychiatric and case manager, they can decide to refer to the RHC CAMHS Low Weight Eating Disorders Pathway.

3. The Community CAMHS Psychiatrist phones RHC Clinical Decision Unit (CDU) on 0141 451 4678 with risk assessment details to discuss next action. If the decision is for an admission, the patient will go to RHC Emergency Department (ED) triage area before going to the Clinical Decisions Unit (CDU) for transfer to ward 3A. Community Psychiatrist informs the Connect-ed team and Liaison Psychiatry of the admission andinpatient psychiatric care discussions take place at that point.

4. The patient is admitted under the shared care of the on call ("hot") Consultant Paediatrician and the Consultant Liaison Psychiatrist. An Inpatient Case Manager is identified (usually a Paediatric Liaison Nurse Specialist or Therapist) and Key Professionals for the case are identified within the Connect-ED and IC&HC teams. A further Key Professional would be the Lead Dietician for the case if they are not already identified due to being Key Connect-ED professional. These professionals will be considered to be the patient's 'Core Team'.

5. As part of minimising risk of refeeding syndrome, meal plans will be in place as per Connect-ED dietician recommendations with continued medical monitoring to ensure safety during the early re feeding stage. Food is offered first, if this is not managed an equivalent oral nutritional supplement is offered to replace the foods not consumed**.** Standard meal plans will be used which have been devised

by the Dietitian (Please see Appendix 5 for food plans and Appendix 6 for food plan instructions). The first 6 meal plans are fixed and non negotiable

6. In the first 24 hours following (if possible) an initial pre-admission meeting, young people will be placed on an initial care plan until it is reviewed by the 3 key clinicians within Connect-ed,Liaison Psychiatry and ICAMH following the first 24 hours. Liaison psychiatry will case manage and ICAMHS will coordinate the cover of meal times. If there is insufficient oral intake within the first 24 hours, consideration is given to commencement of NG feeding.

7. In the first 7 days of re-feeding food plans, during a standard care plan, each clinician allocated to support meals will take a primary role in mealtime support. Discussions will be had with the core team about how transition to upskilling and supporting parents during the 2nd week of admission, or before if applicable. Time frames to complete meals/ oral supplements/NG feed will vary depending on clinical need and parental involvement and mental health nursing capacity. During the first 48 hours meal times will allow 45 minutes in total for consumption of food. If food is not completed there will be time allowed for consumption of oral supplement within this time frame. If completion occurs, there will then be 30 minutes of post-meal supervision. These time frames for meal and post-meal supervision can then be reviewed and adjusted as per clinical situation.

8. If completion is frequently not occurring following offering of oral supplement, the case manager should consider convening an urgent

meeting to discuss whether nasogastric feeding should be used as an option. Nasogastric feeding under patient informed consent may be an option, but it has to be absolutely clear that patient consent is given. If consent is not given, detention under the Mental Health Act and a Designated Medical Practitioner opinion with regard to a T3 Treatment Plan should be considered. If the legislative framework is in place, then a care plan with regard to nasogastric feeding under restraint needs to be approved by the Core Team.

9. The case co-ordinator will coordinate at least weekly care planning meetings. After the first week the appropriate psychiatric inpatient unit may be informed of the young person's progress by Liaison Psychiatry particularly if it is likely that discharge home is not feasible within the 2 week time frame.

10. Within 2 weeks the patient should be physically stable and if assessed as being psychiatrically able to continue treatment in the community will be discharged back to the community with a care package including Community CAMHS, Connect-eating disorders and the IC & HC team, depending on need. If not, an admission to the appropriate psychiatric unit will be arranged.

11. This pathway adheres to the NHS Greater Glasgow & Clyde Consent to Treatment Policy.

See appendix 1 for summary flow chart.

Roles and responsibilities

All Clinicians Involved

It is the responsibility of all involved in the clinical care of the patient and family within the pathway to take a non blaming stance and to empower parents/carers by involving them in decisions and avoidance of being directive (Katzman, Peebles et al. 2013).

Parent/carers role in conjunction with Connect-ed therapist

Family Based Treatment is the first line treatment for low weight child and adolescent eating disorders in GGC and a treatment with the best research evidence for adolescent anorexia nervosa. FBT is provided by the specialist eating disorder team, Connect-ed. The cornerstone of the approach is that there is no blame attached to parents/carers. This treatment has emerged in parallel with the growing literature supporting neurobiological and genetic correlates in the development of eating disorders and calling into question previous notions that they develop as a result of control struggles or family discord. To this end the treatment focuses on moving forward from the illness and family conflicts are considered to be a result of the eating disorders interference rather than being responsible for it (Katzman, Peebles et al. 2013). FBT is similar to inpatient treatment philosophies in that it deals initially with the immediate challenge of eating, priorities early weight gain, sees the illness as taking over the patient and the need for those caring for the patient to take control of it on their behalf. This means tolerating the distress that is inevitably part of challenging the eating disorder and expecting nutritional rehabilitation and weight gain, which is essential for progress toward recovery.

At the early stages of treatment parents/carers are frequently exhausted and overwhelmed by the illness, especially so when their child is first diagnosed. They require sensitive support and psycho education relating to eating disorders. It is the role of the Connect-ED team to work with and support the parents/carers during an admission. At the start of the admission Connect-ed

clinicians will assess the parents/carers readiness to support and facilitate a reduction of eating disorder behaviours whilst their child is an in patient. They will continue to work with them to increase their readiness to take on an increasing role during the admission thus preparing them for discharge back into the community where they will take the major role in taking control of the eating disorder on behalf of their child. This is likely to mitigate or alter the role of mental health nursing during the admission. The Connect-ed clinician working with the family and the IC&HC lead clinician will liaise regularly so that this transfer of responsibility is managed effectively.

In a small minority of cases, where parents are in the early process of separation or if a parent has severe mental health problems, FBT might not be possible. However all families are given all treatment options related to clinical advice on the evidence base. GGC, mirrors the wider research literature, having approximately 10 % of patients who do not progress with FBT, however there are no clear prognostic variables that help us to identify this group of patients at treatment start. Therefore it is the responsibility of the clinical team to help engage families into FBT and take the opportunity to work with them whilst they are in the RHC to start the process of skilling and empowering them to manage the eating disorder within the principles of FBT.

Medical care –

Paediatric - Medical management of patients with Eating Disorders

Assessment: Junior MARSIPAN Risk assessment framework

Children and young people with Eating Disorders may require acute /elective medical admission, if their nutritional status becomes so severe, that it compromises the body's normal metabolic functions.

Warning signs of clinical concern are well described in the MARSIPAN Junior Guidelineshttps://sites.google.com/site/marsipannini/home (see guidelines for further details), and include:

- very low weight or significant ongoing weight loss

- dehydration or significant food / fluid restriction,

- cardiac abnormalities including :

bradycardia, hypotension,syncope, abnormal ECG with prolonged QTc / arrythmias

- metabolic derangement including hypothermia

- biochemical abnormalities including hypophosphataemia

- GI complications including pancreatitis, oesophageal rupture

- neurological compromise including confusion and irritability

The aim of a medical admission will be dependent on the individual patient's clinical status, but is usually to stabilise metabolic issues and prevent re-feeding.

The initial patient discussion prior to a potential admission will involve the Community CAMHS Consultant Psychiatrist and the CDU Consultant

The acute in-patient management plan will then be clarified following a discussion between the Community CAMHS Consultant Psychiatrist and the On call Medical Paediatric Consultant.

Refeeding syndrome (RFS)

This is a potentially serious complication of commencing /significantly increasing feeding in children and young people who have experienced starvation. Eating disorders are not the only time this can occur in paediatric patients.

Risks of RFS are considered highest in:

- Very low weight (see Junior MARSIPAN Amber / Red categories)

- minimal or no feeding prior to admission
- before commencing re-feeding :

  -- where calorie intake is < 400-600kcal per day = Red

  - with severe restriction (less than 50% of required intake) = Amber

- vomiting or laxative misuse will increase the risk.
- previous history of Refeeding syndrome.
- Neutropenia (absolute count < 1.0)

What is the mechanism underlying Refeeding Syndrome?

During starvation, glycogen stores are exhausted. There after energy is produced from skeletal muscle breakdown. Subsequent fatty acid lipolysis results in ketone body production. Insulin levels fall due to low carbohydrate intake. Circulating concentrations of electrolytes are then maintained at the expense of intracellular stores.

Reintroduction of carbohydrate rapidly uses up circulating phosphate, and other electrolytes, as normal intracellular processes are restarted. This can then result in Refeeding syndrome.

Signs/symptoms of Refeeding Syndrome:

Early signs of refeeding syndrome can be non specific. Therefore, patients at risk require careful assessment and monitoring (see guidance on Assessment and Monitoring).

Specific signs and symptoms include :

1)Biochemical –

The most common , and potentially dangerous manifestation is a fall in serum phosphate. This can affect cardiac contractility resulting in arrhythmias.

Other potential derangements include hypokalaemia, hyponatraemia, hypomagnesaemia, hypoalbuminaemia, hypocalcaemia, hypo/hyperglycaemia

2) Cardiac –

Biochemical derangement can result in cardiac impairment, including prolongation of QTc, arrhythmias, bradycardia, syncope, cardiac failure, peripheral oedema.

Caution – resting tachycardia and oedema are potentially concerning signs (see guidance on significant refeeding syndrome) and should be assessed and managed promptly

3) Neurological – symptoms include confusion, irritability and muscle weakness.

Caution – acute confusion is a potentially concerning sign (see guidance on Significant refeeding syndrome) and should be assessed and managed promptly

Rarely, refeeding syndrome can result in death, and therefore prompt and careful management of any biochemical +/or clinical derangement is required.

Caution - Underfeeding is also a risk factor for refeeding syndrome.

Oral phosphate supplementation, resulting in improvement of the phosphate levels, should allow feeds to be increased, provided there is ongoing monitoring. Adjustment of the feed regime should only be done under the guidance of the named dietitian, and following discussion with the responsible Consultant Paediatrician.

Initial Assessment and Monitoring for Refeeding:

Blood investigations

On admission

Check FBC, urea, creatinine and electrolytes (sodium, potassium, calcium, phosphate, magnesium and glucose) and liver function in all patients. PTH and Vitamin D levels may also be useful.

The patient does not require IV cannulation unless there is a requirement for IV fluid replacement or IV medication.

Abnormalities in blood test results, especially in phosphate levels, should be discussed immediately with the responsible Consultant Paediatrician and responsible Dietitian. The current / planned feeding regime should not be altered until these results are discussed with the Dietician and Consultant Paediatrician.

Prophylactic phosphate should only be used on recommendation of the responsible Consultant Paediatrician. It should be considered if there has been previous Refeeding syndrome or there are multiple risk factors for refeeding (see earlier guidance on RFS). Discussion with the on call Paediatric Gastroenterologist, re the use of this prophylaxis, may be required.

Prophylactic multi vitamins (Forceval) should be routinely prescribed for all age groups, thiamine should be prescribed in older children and at the discretion of clinicians for younger children (J Marsipan 2012, pp46); serum vitamins levels will also be obtained.

Ongoing monitoring

Daily bloods (as per admission) for 5 days. After this period, if compliant with food plans and clinically and biochemically stable, blood investigations can be discontinued.

Serum monitoring must be continued if on electrolyte replacement e.g. Phosphate. **The decrease in phosphate associated with refeeding will usually occur within 48-72 hours of feeding being re-establised/increment in feeding.**

If the patient is compliant with their food plans, blood glucose should not be measure routinely after the initial result, unless there is clinical evidence of hypoglycaemia or hyperglycaemia. If signs of either are present, a bedside glucose (BM) and urinalysis should be performed.

If hypoglycaemia is noted on BM, a formal blood glucose should be obtained. Acute management of hypoglycaemia, as per the current GGC guidelines, should be initiated following discussion with the responsible Consultant Paediatrician.

If hyperglycaemia is noted on BM, a formal blood glucose should be performed and the results discussed with the responsible Consultant Paediatrician. Urinalysis to should then be performed on all urine passed.

Cardiac assessment

On admission

All patients should have 24 hour cardiac monitoring in place until they are clinically and biochemically stable.

All patients should have an ECG performed on admission and QTc interval formally calculated and documented :

< 15 years of age (both genders) an abnormal QTc is > 460ms

>15 years of age an abnormal QTc is >450ms (males); >460ms (females)

An abnormal QTc (or other ECG abnormalities) should be discussed with the responsible Consultant Paediatrician, and the on call Cardiology registrar

All patients should have 4 hourly observations including resting pulse and BP (lying and standing)

Ongoing monitoring

The ECG should be repeated daily until it is normal, and the patient is clinically and biochemically stable.

The patient should be examined daily, with specific inspection for oedema (particularly peripheral) and other evidence of cardiac failure

All patients should have 4 - 8 hourly observations including resting pulse and BP (lying and standing) for first 5 days of admission. Once patient is clinically and biochemically stable beyond this period, the observation frequency can be reduced/discontinued.

Other potential clinical issues and monitoring

Neurological

Patients may present with irritability, confusion or other alteration in behaviour. Any acute confusion must be assessed promptly, as this can be a sign of Refeeding syndrome (see guidance on Clinically significant Refeeding Syndrome).

If the patient is confused +/or irritable, regular neurological observations should be performed. A thorough clinical examination should be performed.

Biochemical status should be checked regularly, and any derangements corrected as per clinical guidance.

Caution: **hypophosphataemia and hypoglycaemia** must be excluded as a cause of confusion in these patients. **Sepsis** must also be considered (see below)

Infection

As a result of their metabolic and biochemical derangement, patients with ED are at increased risk of infection and potential sepsis. Infection can be systemic or localised e.g. paronychia, UTI.

Neutropenia can render these patients particularly vulnerable.

Significant neutropenia (<1.0) must be discussed with the responsible Consultant Paediatrician. A thorough clinical examination should be undertaken to exclude sources of infection if the patient is febrile +/or has confirmed neutropenia.

Prophylactic antibiotics are not usually required, but discussion with the responsible Consultant Paediatrician is recommended.

Skin/Dentition

Careful daily assessment of skin is required as patients may be susceptible to skin issues including pressure areas.

Mouth care should be encouraged. There may be mouth ulcers/sores and dental issues including caries and enamel erosion if vomiting has been a feature of the ED. Any mouth complaints will be exacerbated by poor fluid intake.

Management of Low Phosphate

Low phosphate levels MUST be discussed with the responsible Consultant Paediatrician. A serum level < 0.9 or any acute/sudden decrease requires assessment. Serum electrolytes (particularly potassium and calcium) must also be closely monitored.

The responsible dietician must also be informed of the hypophosphataemia

If level is 0.7 – 0.9 commence 1mg/kg Phosphate Sandoz TID orally. Repeat serum phosphate level at 24 hours and review therapy.

If level is 0.5 – 0.7 commence Phosphate replacement at dosing as per the 0.7 -0.9 range, but monitor serum levels every 12 hours and review therapy.

If phosphate is significantly low (<0.5) consider IV phosphate replacement, as large oral doses of Phosphate replacement may not be tolerated due to GI side effects and poor absorption. Discuss with the responsible Paediatric Consultant. Serum levels should be monitored every 8 hours and therapy reviewed.

If phosphate is still markedly low at 12 hours then consider an increasedoral dose, or IV correction. Please discuss with the responsible Consultant Paediatrician

Phosphate levels < 0.5 may result in cardiac issues, and levels < 0.3 can be of particular concern. Careful monitoring and early medical management should minimise this risk.

Further advice re the management of low phosphate levels, if required, can be obtained from discussion with the on call Consultant Paediatric Gastroenterologist

Do not make any increases to the feeding regime until the serum phosphate has been corrected and a discussion with the responsible Dietitian has occurred.

If phosphate drops <0.5 then consideration should be given to reducing the feed back to the previous calories. This should be discussed with the responsible Dietitian for guidance.

Caution: Low phosphate levels **prior** to commencing feeding are unusual. In this case, other causes of low phosphate should be excluded; specifically Vitamin D deficiency and hypoparathyroidism. Check PTH and Vitamin D with next set of bloods (if not previously checked). These blood results should not hinder commencing of feeding, once phosphate is normalised.

Ongoing Monitoring of Refeeding Syndrome

All patients considered at risk of refeeding syndrome should be monitored for clinical signs of the re-feeding syndrome:

Clinically significant refeeding syndrome:

- Resting tachycardia (differential for this includes anxiety).
- Oedema, especially in the legs.
- Confusion or altered conscious state (always check Glucose in this case)
- Low serum phosphate (note level may be normal)

Resting tachycardia alone should prompt a urgent medical review, urgent electrolytes including Phosphate (bone profile), ECG and careful monitoring.

DO NOT INCREASE FEEDS UNTIL RE-FEEDING SYNDROME has been excluded.

Management of clinically evident Refeeding Syndrome

Inform responsible Consultant Paediatric Consultant

Ensure patient is on a cardiac monitor, especially those with evidence of arrhythmia and electrolyte abnormalities. Perform an urgent ECG. Any ECG abnormalities/arrythmias need discussed with the on call cardiology team.
Immediately check: FBC, U&E (including Magnesium, phosphate, calcium), LFT; blood gas for formal acid-base (and more immediate measurement of sodium and potassium) and blood sugar.
Reduce calories to starting dose
Electrolyte and glucose derangements should be corrected – usually intravenously.
Hypoalbuminaemia is often present and should be discussed with the responsible Consultant Paediatrician/HDU team
Start regular neurological and baseline observations

Inform HDU

Consider differential diagnoses for clinical presentation including sepsis and hypoglycaemia

Other complications during refeeding:

- Severe central abdominal pain during re-feeding. Consider pancreatitis or superior mesenteric artery syndrome.

Weaning phosphate

Long-term phosphate can lead to paradoxical hypophosphataemia, so a weaning plan is important.
Phosphate can normally be weaned off after two weeks of treatment, if phosphate levels remains stable within the normal range. Reduce the dose by

one Sandoz phosphate tablet every two days, with serial measurement of phosphate levels.

Note: Side effects of phosphate treatment include diarrhoea and abdominal pain. Consider reducing the dose if phosphate is stabilised. Consider administering phosphate via an IV route instead of oral if side effects are significant

Food plans and feeds

All feed plans and any biochemical derangements should be discussed with the responsible dietitian.

Psychiatry

Community CAMHS Psychiatrist

The Community CAMHS Psychiatrist will assess the patient as per the Care Pathway for Management of Low Weight Eating Disorders in Community CAMHS (see Summary Appendix 2). Based on physical assessment and or investigations, they will make a decision as to the need for a likely paediatric admission or a 'soon' medical out-patient clinic appointment. If an admission is needed, the Community Psychiatrist will contact the RHC CDU consultant to discuss the patient and decide on the next step. If admission is deemed necessary they will then contact the family, paediatric liaison psychiatry and Connect eating disorders. In addition they will fax the referral proforma to Admitting consultant at the RHC (see Appendix 3) They will additionally inform the relevant psychiatric inpatient hospital of the admission. The Community CAMHS Psychiatrist will remain in contact with Paediatric Liaison Psychiatry and keep the patients case manager informed. Both the patients Community CAMHS Psychiatrist and their case manager will be invited to the multi disciplinary discharge meeting.

Paediatric Liaison Psychiatry

The consultant in Paediatric Liaison Psychiatry will oversee the psychiatric management of this admission. This will include assessment of the patient and meetings with parents/carers. There will be regular, if possible daily,

contact with the on call paediatrician as well as regular communications with the patient and family, all CAMHS clinicians and appropriate in-patient psychiatric service as required.

If the patient requires to be detained under the Mental Health (Scotland) Act, this will be arranged by the consultant psychiatrist who will be the patient's RMO. The patient cannot leave the hospital unless this is agreed with the RMO.

The Paediatric Liaison consultant will maintain good communication between other Paediatric Liaison Psychiatry team colleagues, the paediatric team and community based services, convening a meeting by the end of the first week of the admission.

Nursing care

Paediatric

Paediatric nursing have a role in managing the medical management of patients and will require to have an understanding of eating disorders as a mental illness. Paediatric Nursing care will be guided by medical assessment of a young person's overall health and the daily ward round. Medical staff may advise a number of interventions due to the patient' compromised physical state and likely risk of re feeding syndrome.

These may include

- Bed rest: may be required in view of compromised physical state. Liaise with Tissue Viability Nurse regarding use of special mattress

.

- Physical observations: Blood glucose, blood pressure, pulse & core temperature may be checked up to 4 times daily. Patients are vulnerable to hypothermia so ensure the room is kept warm

- Supervision: toilet/showers: owing to patient's compromised physical state, and to monitor for abnormal behaviours (e.g. vomiting or exercise)

- Weight: use the same set of scales, at the start of the day 2 times per week, wear t-shirt & shorts to weigh. The eating disorder may make the young person want to falsify their weight e.g. hide things in pyjamas/clothes to increase weight or load with water prior to weighing. If this is considered an issue Psychiatric nursing support can be sort for weighing of the patient

- Leave: older patients not under the Mental Health Act cannot legally be prevented from leaving the ward, except when this is a reasonable exercise of parental authority shared with staff.

- Recording of food and fluid. Fluid balance should be carefully monitored –to prevent under or over hydration. Meals: meal plans will be in place to reduce the risk of re feeding syndrome, parents and mental health staff will be involved in supporting all meal times. mental health nursing staff will record all food and fluid consumed when they are present, Paediatric nursing staff will record all food and fluid consumed at other occasions.

- If oral nutrition is inadequate the treatment team will decide to start NG feeding. Patients are always given the option of managing their nutritional orally first, NG tube is passed as a last resort. Paediatric nursing staff will pass an NG tube, while the patient is supported by mental health nursing staff. Pediatric staff will bolus enteral feed as per Dietitians feeding regimen, once complete the NG tube is taken out.

- Paediatric nurse should explain procedure and gauge consent from young person. Staff should ask what would be helpful to support them getting the NG tube passed

- Boundaries/Rules: Set firm boundaries/rules regarding management and ensure all staff and parents are aware and following them

mental health nursing

In this case mental health nursing is made up of staff from the following teams, the Intensive Community and Homebased CAMHS team (IC&HC), Liaison Psychiatry and Connect-eating disorders. The IC&HC clinician leading on the case will be responsible for coordinating a rota of IC& HC, Liaison Psychiatry and Connect-ed nursing staff during the admission. In addition Connect-ed Dietetic staff and FBT therapists will be skilled and available for supporting meal times.

Mental Health staff have a role in supporting the patient, parents and paediatric staff with the patient's eating disorders behaviors. For example, food avoidance and associated distress at meal times, reduction of exercise and other purging behaviors. In the initial stages this will include at least 3 visits per day to the patient on the ward. The IC&HC case lead and Connect-ed clinician who is supporting the family will liaise to assessing the parents' readiness for an increased role in managing their child's eating disorder behaviours. This is likely to result in parents/carers gradually taking over the mental health nursing role as they learn more about eating disorders, and how to manage their own child's eating disordered behaviours.

Nutrition- meal times

Medical recovery is likely to be dependent on adequate nutritional intake and a reduction in compensatory behaviors. Re feeding risk is likely to be high and therefore meal plans will be in place that mitigate this risk, whilst increasing as quickly as possible to prevent under feeding syndrome and then to promote weight gain. With continued medical monitoring to ensure safety during the early re feeding stage.

Consumption of all food on the food plan is therefore a priority. Firstly food will be offered, if this is not managed an equivalent oral nutritional supplement is offered to replace the foods not consumed. If there is in sufficient oral intake within the first 24 hours, the treatment team will consider the commencement of NG feeding.

See dietetic section and appendix 4,5,6,7.

Mental health nursing at meal times:

- Standard Meal plans will be used which have been devised by the Dietitian (Please see Appendix 5 for food plans and Appendix 6 for food plan instructions). The first 6 meal plans are fixed and non negotiable

- Meals will be portioned by psychiatric staff supporting meals as per portioning guidelines (See appendix 6).
- Mental health nursing staff are responsible for putting food trackers in the nursing notes located on the door of the patients bedroom at the first contact. (See appendix 7). Mental health nursing staff are also responsible for recording all food and fluid consumed when they are with the patient, on food trackers found in ward nursing notes.
- Unless otherwise indicated, the family will be encouraged and empowered to be apart of recovery using Family Based Treatment principles. Parents' readiness to participate in meal time support will be assessed throughout the admission and they will be supported to take an increasing role in managing meals if the admission progresses towards recovery.
- Psychiatric members of staff will offer meal time support and encourage the patient to consume all on their food plan at 3 meal times, taking both an empathetic and firm approach, utilizing externalisation techniques, distraction, and remaining positive at all times. As the admission progresses modeling and supporting parents/carers to feel skilled to support meal times and deferring to their knowledge of their child. This will usually happen in the 2nd week of admission, but may happen sooner if agreed across the core team around the family.

- Mental health nursing staff will be vigilant against food being avoided, hidden or spoilt, any food that is spoilt will be replaced and the patient will continue to be supported to eat. Where clinically relevant they will

also support patients to avoid unhelpful ritualistic eating behaviours e.g. mashing and smearing, spoiling food, chopping/ dissecting/separating of food.

- Time frames to complete meals/ oral supplements/NG feed will vary depending on clinical need and parental involvement and mental health nursing capacity. During the first 48 hours meal times will allow 45 minutes for consumption of food. If food is not completed there will be time allowed within that time frame for consumption of oral supplement. If completion occurs, there will then be 30minutes of post-meal supervision
- Mental health nursing staff will work with parents/carers to provide supervision after meal times to prevent purging and utilise distraction techniques.
- Patients will be reminded to use the toilet before the meal starts as they will not be expected to go until after supervision has finished. If a patient insists they must go, Supervision by a staff member should be offered. This cannot be enforced against the patient's will if they are not detained.
- Mealtimes will be set on the ward: 8.30 am, 12pm and 5pm. Snacks may be incorporated later in the admission, if the patient is able to manage them without psychiatric nursing support, otherwise the patients nutritional requirements will continue to be met at 3 main meals only.
- Meals will be taken away from the patients bed in a separately allocated room
- Evaluate how the meal went with the patient and their parents/carers and give positive and constructive feedback.
- Psychiatric and paediatric nursing staff have a joint task of keeping accurate food record charts.

Dietetics

Ideally all dietitians working with eating disorder patients should be specialists in eating disorders [Rome et al(2003), Mental Health Group (2011)]. The majority of patients will have had at least a dietetic assessment with the Connect-eating disorders Dietitian, as part of their physical assessment as per the tier 3 Anorexia Nervosa care pathway prior to admission. It is anticipated that all patients requiring admission will be at risk of re feeding syndrome.

There has been close collaboration between Connect-ed Dietetics, Paediatric Dietetics and Paediatricians on the completion of this pathway. Safe starting calorie requirements, daily calorie increments and the formulae for calculating nutritional requirements for weight gain, once the patient is out of risk of re feeding syndrome, have all been agreed. These decisions are based on best evidence in terms of research (O'Connor, 2016, Shaw, 2015, O'Connor G, Goldin J 2011,) and clinical experience (Maudsley South London University Hosptials and Kings College), to safely refeed young people whilst also preventing under feeding syndrome (Junior MARSIPAN, Royal College of Psychiatry 2012). The catering system would not allow for each patient to have an individualised food plan. Therefore standardised food plans have been drawn up.

Responsible Dietitian

The Connect-ed Dietitian or in their absence a member of the Connect-ed team will inform the specialist Paediatric dietitian at RHC immediately of any admission. A decision will be made as to who will lead on dietetic care, depending on previous involvement with Connect-ed Dietitian and capacity from CAMHS/ paediatrics. Regular practice would be that in most cases the Connect-ed Dietitian will take the lead dietetic role. The lead dietitian responsible for patients care will be clearly documented in paediatric medical notes and CAMHS (EMIS) notes.

Paediatric on call Dietitians will hold a copy of the relevant parts of this document, food plans, food portion guidelines, food replacement guidelines, food record charts, in their on call folder, to use if necessary out of hours.

Food planning to prevent Refeeding syndrome

- **Patients ≥30 kg**

Food plans for all patients ≥30 kg will start at 1200 kcals (i.e. ≤ 40 kcal/kg) with daily 200 kcal increments for 5 days (day 1= 1200, day 2 = 1400, day 3 = 1600, day 4 = 1800, day 5 = 2000). From food plan 6, for patients who are no longer considered at risk of refeeding syndrome their individual requirements for weight gain will be calculated using the scholfield equation (Scolfield et al. 1985) and documented in Clinical Paediatric Dietetics (2015, pp 74, table 5.6), with a PAL of 1.2 or greater dependant on additional activity. And any required increments will be made in conjunction with carers, who may wish to bring snack foods, from home to help meet their childs increased nutritional needs. The timing for this will be considered in conjunction with the whole team and in particular the Connect-ed team working with the carers.

- **Patients <30 kg**

For patients who are <30 kg they will start at 1000 kcals (i.e. for patients ≥25 kg, ≤ 40 kcal/kg) at day 1 and then move up food plans as above.

Food plans are made up of the energy dense choices on the menu, so there are no menu choices for patient, staff or carers to make during early re feeding.

Food plans are in appendix 5 and portioning guidance 6. Dietitians will have a role in training and supporting CAMHS staff who are providing meal time supervision and carers, as to correct portioning of food during early refeeding, see appendix 4 for food plan instructions.

Replacement oral supplements and NG Feeds

Patients who are ≤30 kg will use 1.5 kcal/ml Paediatric Oral Nutritional Supplement (at time of writing PaediaSure Plus Fibre sip feed =1.5 kcals/ml, 4.2 g protein/100 ml energy distribution: protein 11.1 %, CHO 43.2%, fat 44.3%, fibre 1.45%) and those >30 kg will use 1.5 kcals/ml Adult Oral Nutritional Supplement (at time of writing = Ensure plus fibre 1.6 kcals/ml, 6.2

g protien/100ml, energy distribution: protein 16.1 %, CHO 52.1%, Fat 28.6%, Fibre 3.2%) to replace items not managed on the food plan – as per supplement replacement guidelines. The Dietitian will advise clinicians and carers involved of supplement replacement guidelines for use at meal times as required, either orally or via NG tube. Where the risk of re feeding is high and or the majority of energy is from nutritional supplements the Dietitian will consider changing patients >30 kg from Ensure plus fibre to PaediaSure Plus Fibre, to reduce their carbohydrate intake during early refeeding .

Nasogastric (NG) Feeding Guidance

Firstly food will be offered, if this is not managed an equivalent oral nutritional supplement will be offered to replace the foods not consumed (see section above). If there is insufficient oral intake within the first 24 hours (Junior MARSIPAN Guidelines 2012), the Psychiatric treatment team will consider the commencement of NG feeding following a meeting of the core team:

- NG feeding should take place in the treatment room separate from bedroom/dining area. If this is not possible, due to patient distress and/or ward activity, NG feeding should take place in as safe an environment as possible, whether bedroom/dining area or otherwise.
- If the patient requires restraining the Mental Health Act will first be applied. A 'nasogastric feeding under restraint' care plan should be agreed by the core team using the care plan in Appendix 8 as a template
- 4 members of staff trained in restraint should be available plus one member of paediatric nursing staff to pass the tube
- If the young person is unable to manage after 5 minutes then two mental health professionals should sit alongside the young person and use restraint as per guidelines if necessary. **Restraint should only be used as a last resort and all efforts should be made to maintain safety.**

- Up to an agreed point in the process related to NG feeding, the young person will be able to ask for a supplement as an alternative to the NG feed.
- Feed will be by bolus. The amount will be determined by food plan and supplement replacement guidelines, with the nutritional equivalent of the amount of meal not consumed being converted into an enteral feed bolus.
- Afterwards it would be the standard practice of this pathway for the NG tube to be taken out to help encourage oral intake. The consultant paediatric liaison psychiatrist should be informed of any divergence from this practice.

Communication

Documentation

The young person clinical notes are held across two different electronic records Trakcare/ Clinical Portal (Paediatric) and EMIS (Psychiatric file).Paper nursing notes are situated in a folder on the door of the patients room and then scanned on to Clinical portal; this should include a space for some narrative around emotional and behavioural presentation. Food record charts for recording compliance of foods and fluids on the food plan, will be kept in the nursing notes, it will be the responsibility of mental health professionals involved to ensure these are completed accurately and to scan them onto EMIS in a timely manner. Dietetic and CAMHS staff will be responsible for putting Food record charts into the folders at the time of admission.

Paediatric nurses will ensure that notes relating to nursing medical issues, fluid balance, and dietary intake and nursing observations are documented in paediatric nursing notes. The details of the medical ward round and other relevant medical issues will be entered into the medical notes by the responsible Doctor. The responsible Dietitian will enter the dietetic management plan into the medical notes and onto emis, including their contact number at the start of the admission, which will include required biochemical tests and a copy of the refeeding summary. If the responsible

dietitian did not have access to emis a member of the liaison psychiatry team would scan this the plan onto emis on their behalf.

It is the Paediatric Liaison Psychiatry clinical team's responsibility to record relevant information and nursing plans in paediatric case notes and to ensure that important medical information is uploaded on to EMIS, this includes; weights, relevant medical observations and food charts. The hospital dietitian will also record in the patient's paediatric file.

Meetings

Full MDT meetings, including all clinicians involved and the parents/carers, will be organised by the hospital-based case co-ordinator at the start of admissions and early within the second and final week of the admission.
Additional meetings may well be required with a smaller number of key clinicians and the carers, as clinical decision making is likely to be required by the team on a regular and ongoing basis.
Key decision of these meeting will be documented on EMIS and in the medical notes.

Outcomes and evaluation

Suggested Data Collection

***Key ED demographic data at assessment*:**

CAMHS team

Diagnosis,

Anthropometrics current and historic length of ED symptoms

Previous treatment,

Presence of purging/exercise

Co morbidity,

Family situation (intact / separated)

EDE-Q

Biochemistry

Pulse/BP

ECG.

Discharge data

Length of admission

Where discharged to

Medical outcomes: Refeeding biochemistry, Requirement for correction of electrolytes, cardiac status, anthropometrics, infection, neurological sequelae.

Psychiatric outcomes: Requirement for detention, Parental involvement,

Dietetic outcomes: requirement for enteral feeding, food plan compliance

Longer term at 6 months post discharge

Treatment undertaken

Treatment compliance

Anthropometrics, EDE-Q

Interview

References

GOWERS S.G., CLARK A., ROBERTS C., GRIFFITHS A., EDWARDS V., BRYAN C., SMETHURST N., BYFORD S., & BARRETT B., 2007. Clinical effectiveness of treatments for anorexia nervosa in adolescents: Randomised controlled trial. *British Journal of Psychiatry,* **191**, pp. 427-435.

KATZMAN, D.K., PEEBLES, R., SAWYER, S.M., LOCK, J. and LE GRANGE, D., 2013. The role of the pediatrician in family-based treatment for adolescent eating disorders: Opportunities and challenges. *Journal of Adolescent Health,* **53**(4), pp. 433-440.

LOCK, J., LE GRANGE, D., AGRAS, W., MOYE, A., BRYSON, S., BOOIL, J., 2010. Radomized Clinical Trail Comparing Family-Based Tratment with Adolescent-Focused Individual Therapy for Adolescents with Anorexia Nervosa. *Archives of General Psychiatry,* **67**(10), pp. 1025-1032.

Mental Health Group. (2011). Dietitians Working with Patients with Eating Disorders. Positional Statement for the British Dietetic Association. Birmingham. www.bda.uk.com

NATIONAL INSTITUTE FOR CLINICAL EXCELLENCE (NICE), 2004. *Eating Disorders (Clinical Guideline 9).* London: NICE.

O'Connor G, Goldin J The refeeding syndrome and glucose load. *Int J Eat Disord*, 2011, **44** 182−5. Shaw V, Clinical Paediatric Dietetics, 4th Edition, 2015, p. 675 table 22.3

O'Connor, G., Nicholls, D., Hudson, L. and Singhal, A., 2016. Refeeding Low Weight Hospitalized Adolescents With Anorexia Nervosa: A Multicenter Randomized Controlled Trial. *Nutrition in clinical practice: official publication of the American Society for Parenteral and Enteral Nutrition*.

Rome, E., et al (2003). Children and Adolescents with Eating Disorders:The State of the Art. *American Journal of Paediatrics*. Vol **111**no.1. 98-108.

ROYAL COLLEGE OF PSYCHIATRY, 2012. *Junior MARSIPAN:Management of Really Sick Patients under 18 with Anorexia Nervosa.* CR168. London: Royal College of Psychiatry. **https://sites.google.com/site/marsipannini/home**

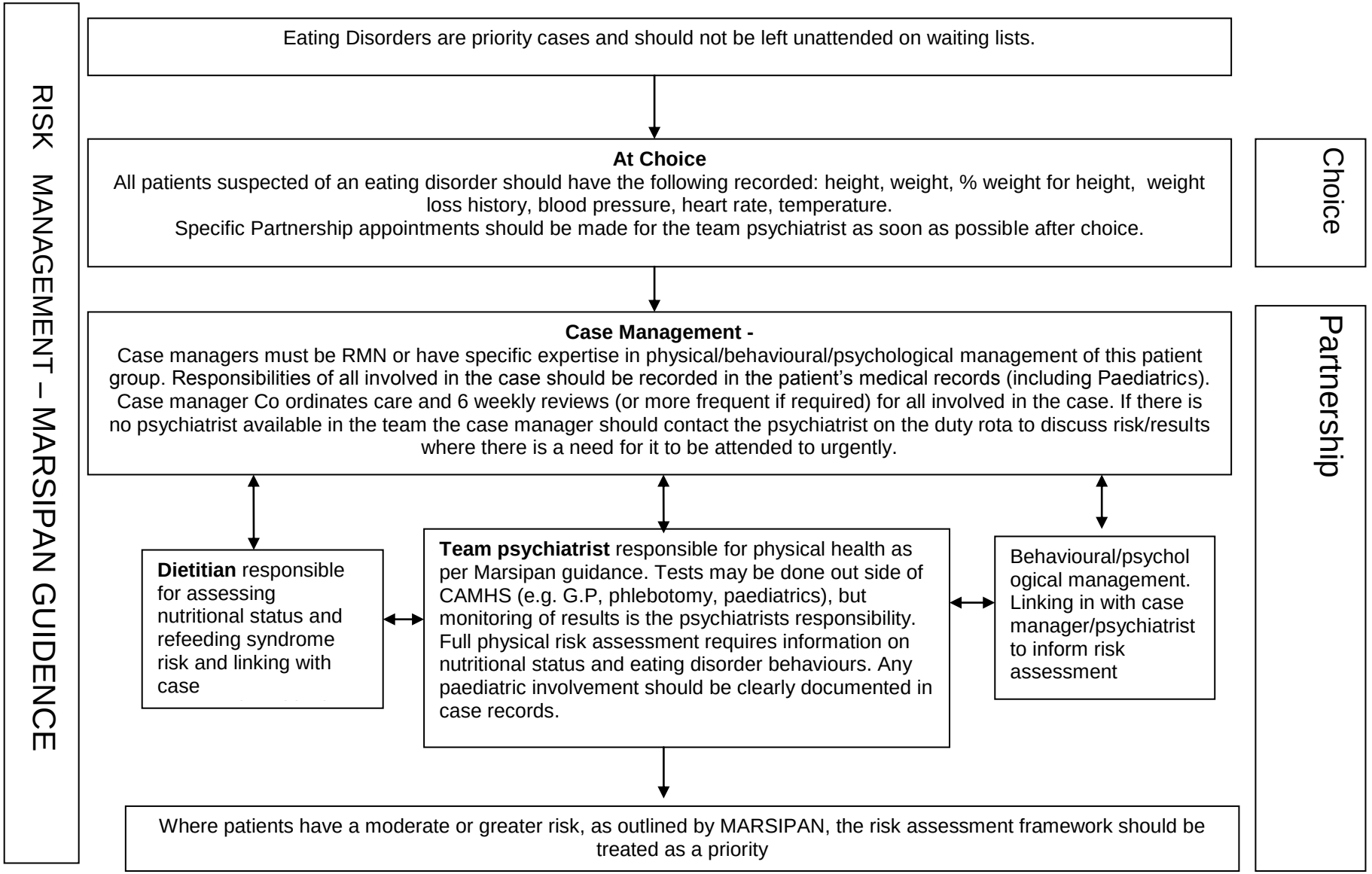
Schofield WN. Predicting basal metabolic rate, new standards and review of previous work. Human Nutrition: Clinical Nutrition 1985;39C:5-41.

Appendix - to be completed

Appendix 1: RHC CAMHS pathway summary

Appendix 2: Tier 3 Anorexia nervosa care pathway diagram

Care pathway for physical management of all patients with Anorexia Nervosa/Atypical AN with clinically significant weight loss in NHSGGC CAMHS. NHSGGC CAMHS to work within the guidance for physical care outlined by the junior MARSIPAN 2012 document (web address for full document https://sites.google.com/site/marsipannini/home)


RISK MANAGEMENT – MARSIPAN GUIDENCE
Eating Disorders are priority cases and should not be left unattended on waiting lists.
At Choice
All patients suspected of an eating disorder should have the following recorded: height, weight, % weight for height, weight loss history, blood pressure, heart rate, temperature.
Specific Partnership appointments should be made for the team psychiatrist as soon as possible after choice.
Choice
Case Management -
Case managers must be RMN or have specific expertise in physical/behavioural/psychological management of this patient group. Responsibilities of all involved in the case should be recorded in the patient's medical records (including Paediatrics). Case manager Co ordinates care and 6 weekly reviews (or more frequent if required) for all involved in the case. If there is no psychiatrist available in the team the case manager should contact the psychiatrist on the duty rota to discuss risk/results where there is a need for it to be attended to urgently.
Partnership
Dietitian responsible for assessing nutritional status and refeeding syndrome risk and linking with case
Team psychiatrist responsible for physical health as per Marsipan guidance. Tests may be done out side of CAMHS (e.g. G.P, phlebotomy, paediatrics), but monitoring of results is the psychiatrists responsibility. Full physical risk assessment requires information on nutritional status and eating disorder behaviours. Any paediatric involvement should be clearly documented in case records.
Behavioural/psychol ogical management. Linking in with case manager/psychiatrist to inform risk assessment
Where patients have a moderate or greater risk, as outlined by MARSIPAN, the risk assessment framework should be treated as a priority

Appendix 3: Referral Proforma

"***Supporting the recovery of Children and Adolescents with eating disorder"***

REFERRAL PROFORMA	
PATIENT DETAILS	**REGISTERED GP DETAILS**
Full Name:	**Name:**
Address:	**Practice Details**
Home Tel:	**Telephone:**
Mobile Tel:	**Fax:**
D.O.B:	**Registered Practice:**
Gender:	**CHI No:**
Ethnicity:	
Referring Clinician:	
Other Agencies involved:	

Height: ☐	**Weight:** ☐
BMI: ☐	**Weight stable:** ☐ **Yes/No**
Blood Pressure: ☐	**Pulse:** ☐

Investigations										
FBC	U&Es	Potassium	Magnesium	Phosphate	LFTs	TFTs	CRP	Calcium	ECG	DEXA
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Clinical Presentation: (Please include any treatment, Drug history, allergies, admissions, therapy, and co-morbidity, and current medication, medical and family history: ☐

Appendix 4: **Food plan / Provision Instructions**

Background Information.

The food plans are based on the nutritional information for all foods on the menus from Feb 2016. This nutritional information is subject to the normal errors of carrying out nutritional analysis e.g. raw weight to cooked weight, accurate use of recipes etc.

There is a 2 week menu cycle, most of the meals/foods are the same in the childrens and adult hospital, but there is some variability. Foods are cooked centrally, frozen and regenerated in the hospital. Standard portions do not apply due to the variety of ages and therefore nutritional requirements being catered for. Meals will arrive on the ward mostly in bulk containers. Parents normally pick meals and portions for their children from these containers.

For greatest accuracy food plans have been constructed from standard items, with limited menu choice.

Instructions for Food Plans

Dislikes can only be taken into account if they were present well before the eating disorder started. 1 dislike is only allowed.

If a main meal choice has a disliked ingredient, it can be replaced only by a listed sandwich and a 85g Rowan Glen Yoghurt. All main meals on the food plan have the same calorific value. The sandwiches on the food plans also have the same caloric value.

If a child has food allergies, confirmed by their paediatric notes, the Dietitian will adapt food plans individually for them.

CAMHS staff who are supervising meals are also responsible for portioning all 3 meals, with parents joining as appropriate. This will include weighing foods, cereal at breakfast and main meals at evening meal. See appendix 6 for the weights of all evening meals.

Food weighing scales are on the ward. Put the plate onto the scale and zero the scale, weigh the first ingredient and zero the scale for the next ingredient.

All foods should be plated when given to the patient to avoid them reading nutritional labels. This includes, sandwiches on plates, yoghurts being put into bowls and fruit juice into a glass.

The Dietitian will inform staff if the patient is to start on food plan 1 or 2, thereafter with full food plan compliance, food plans will move up daily unless Paediatric medical staff or the Dietitian advises otherwise.

There are 6 prescribed food plans from 1000 – 2000 kcals, after food plan 6 the patient will move to meet their nutritional requirements for weight gain. Food plan 6 will be increased, on an individual basis, to meet these requirements as prescribed by the Dietitian.

Appendix 5: Food plans 1 – 6

RHC CAMHS Pathway Food Plans **Date**

Patient: CHI:

FOOD PLAN 1.

BREAKFAST		Replacement Supplement PaediaSure Fibre
Fruit Juice	85 ml carton + 100 ml water	25ml
Cereal Milk	55 g Cornflakes + 100 ml whole milk or 2 x Weatabix + 200 ml whole milk	140 ml 45 ml 90 ml 90ml
LUNCH		Replacement Supplement PaediaSure Fibre
Drink	Water	200ml
Sandwich Pre packed white or wholemeal	Cheese or Egg Mayo or Salmon Mayo or Chicken Mayo	
Yogurt		
EVENING MEAL		Replacement Supplement PaediaSure Fibre
Drink	Water	
Meal	Check menu cycle – see portion guide notes appendix 9- to plate meal	See appendix 8
other		
Yogurt		

Additional notes.

Dislike 1_____

Fluid – requires minimum of 8 glasses of fluid per day.

All food and fluids must be recorded.

Other:

_____

_____

RHC CAMHS Pathway Food Plans **Date**
Patient: CHI:

FOOD PLAN 2.

BREAKFAST		Replacement Supplement PaediaSure Fibre	Ensure Plus Fibre
Fruit Juice	85 ml carton + 100 ml water	25ml	20ml
Cereal Milk	55 g Cornflakes + 100 ml whole milk or 2 x Weatabix + 200 ml whole milk	140ml 45ml 90ml 90ml	130ml 40ml 85ml 85ml
Toast/bread Margarine	1 slice + 5g margarine (1/2 pack)	50ml 25ml	45ml 25ml
LUNCH		Replacement Supplement PaediaSure Fibre	Ensure Plus Fibre
Drink	200ml whole milk	90ml	85ml
Sandwich Pre packed white or wholemeal	Cheese or Egg Mayo or Salmon Mayo Or Chicken Mayo	200ml	190ml
Yoghurt			
EVENING MEAL		Replacement Supplement	
Drink	Water		
Meal	Check menu cycle-see portion guide notes appendix 9- to plate meal	See appendix 8	
other			
Yoghurt			

Additional notes.
Dislike 1_____

Fluid – requires minimum of 8 glasses of fluid per day.

All food and fluids must be recorded.

Other: _____

_____

RHC CAMHS pathway Food plans **Date**

Patient: CHI

FOOD PLAN 3.

Break fast		Replacement Supplement PaediaSure Fibre	Ensure plus Fibre
Fruit Juice	85 ml carton + 100 ml water	25ml	20ml
Cereal Milk	55 g Cornflakes + 100 ml whole milk or 2 x Weatabix + 200 ml whole milk	140 ml 45 ml 90 ml 90ml	130 ml 40 ml 85 ml 85ml
Toast/ bread Margarine	2 slice + 5g margarine (1/2 pack)	100 ml 25ml	90ml 25ml
LUNCH		Replacement Supplement PaediaSure Fibre	Ensure plus Fibre
Drink	200 ml whole milk	90ml	85ml
Sandwich Pre packed white or wholemeal	Cheese or Egg Mayo or Salmon Mayo or Chicken Mayo	200ml	190 ml
Yoghurt	85 g tub rowan glen strawberry or toffee or apricot	85 ml	80 ml
Other			
EVENING MEAL		Replacement Supplement	
Drink	Water		
Meal	Check menu cycle – see portion guide notes appendix 9- to plate meal	See appendix 8	
other			
Yoghurt			

Additional notes.

Dislike 1_____

Fluid – requires minimum of 8 glasses of fluid per day.

All food and fluids must be recorded.

Other:

_____

_____

RHC CAMHS pathway Food plans **Date**
Patient: CHI

FOOD PLAN 4.

BREAKFAST		Replacement Supplement PaediaSure Fibre	Ensure Plus Fibre
Fruit Juice	85 ml carton + 100 ml water	25ml	20 ml
Cereal Milk	55 g Cornflakes + 100 ml whole milk or 2 x Weatabix + 200 ml whole milk	140 ml 45 ml 90 ml 90ml	130 ml 40 ml 85 ml 85ml
Toast/ bread Margarine	2 slice + 10g margarine (1 pack)	100 ml 50ml	90ml 50ml
LUNCH		Replacement Supplement PaediaSure Fibre	Ensure Plus Fibre
Drink	200 ml whole milk	90ml	85ml
Sandwich Pre packed white or wholemeal	Cheese or Egg Mayo or Salmon Mayo or Chicken Mayo	200ml	190 ml
Yoghurt	85 g tub rowan glen strawberry or toffee or apricot	85 ml	80 ml
Other			
EVENING MEAL		Replacement Supplement PaediaSure Plus Fibre	Ensure Plus Fibre
Drink	2 x 85 ml fruit juice + water	50ml	50ml
Meal	Check menu cycle – see portion guide notes appendix 9- to plate meal	See appendix 8	See appendix 8
other	1 x plain digestive biscuit	45ml	45 ml
Yoghurt			

Additional notes.
Dislike 1_____

Fluid – requires minimum of 8 glasses of fluid per day.

All food and fluids must be recorded.

Other:
_____

_____

RHC CAMHS Pathway Food Plans **Date**
Patient: CHI:

FOOD PLAN 5.

BREAKFAST		Replacement Supplement PaediaSure Fibre	Ensure Plus Fibre
Fruit Juice	2 x 85 ml carton + water	50ml	50 ml
Cereal Milk	55 g Cornflakes + 100 ml whole milk or 2 x Weatabix + 200 ml whole milk	140 ml 45 ml 90 ml 90ml	130 ml 40 ml 85 ml 85ml
Toast/ bread Margarine	2 slice + 20g margarine (2 packs)	100ml 100ml	90ml 100ml
LUNCH		Replacement Supplement PaediaSure Fibre	Ensure Plus Fibre
Drink	200 ml whole milk	90ml	85ml
Sandwich Pre packed white or wholemeal	Cheese or Egg Mayo or Salmon Mayo or Chicken Mayo	200ml	190ml
Yoghurt	85 g tub rowan glen strawberry or toffee or apricot	85ml	80ml
Other			
EVENING MEAL		Replacement Supplement PaediaSure Fibre	Ensure Plus Fibre
Drink	2 x 85 ml fruit juice + water	50ml	50ml
Meal	Check menu cycle – see portion guide notes appendix 9- to plate meal	See appendix 8	See appendix 8
5other	2 x plain digestive biscuit	90ml	90 ml
Yoghurt			

Additional notes.
Dislike 1_____

Fluid – requires minimum of 8 glasses of fluid per day.

All food and fluids must be recorded.

Other:
_____

_____

RHC CAMHS Pathway Food Plans **Date**
Patient: CHI:

FOOD PLAN 6.

BREAKFAST		Replacement Supplement PaediaSure Fibre	Ensure Plus Fibre
Fruit Juice	2 x 85 ml carton + water	50ml	50 ml
Cereal &l Milk	55 g Cornflakes + 100 ml whole milk or 2 x Weatabix + 200 ml whole milk	140 ml 45 ml 90 ml 90ml	130 ml 40 ml 85 ml 85ml
Toast/ bread Margarine	2 slice + 20g margarine (2 packs)	100 ml 100ml	90ml 100ml
LUNCH		Replacement Supplement PaediaSure Fibre	Ensure Plus Fibre
Drink	200 ml whole milk	90ml	85ml
Sandwich Pre packed white or wholemeal	Cheese or Egg Mayo or Salmon Mayo or Chicken Mayo	200ml	190 ml
Yoghurt	85 g tub rowan glen strawberry or toffee or apricot	85 ml	80 ml
Other	1 x plain digestive	45 ml	45 ml
EVENING MEAL		Replacement Supplement PaediaSure Fibre	Ensure Plus Fibre
Drink	2 x 85 ml fruit juice + water	50ml	50ml
Meal	Check menu cycle – see portion guide notes appendix 9- to plate meal	See appendix 8	See appendix 8
other	2 x plain digestive biscuit	90ml	90 ml
Yoghurt	85 g tub rowan glen strawberry or toffee or apricot	85 ml	80 ml

Additional notes.
Dislike 1_____

Fluid – requires minimum of 8 glasses of fluid per day.

All food and fluids must be recorded.

Other:_____

_____

Appendix 6: **Food plan portioning**

To accompany Food plans 1 – 6.
Meals will be weighed on the ward by CAMHS staff. Zero the weighing scale between each food item to get an accurate measurement.

Menu cycle	**Day**	**Food**	**Weight**	**Replacement supplement** PaediaSure Plus Fibre	Ensure Plus Fibre
Week 1	Mon	Macaroni Cheese	250 g	270ml	250ml
	Tues	Meal balls Boiled Rice	200 g 110 g	180ml 90ml	170ml 85ml
	Wed	Sausage + Gravy (2 sausages) Potato Wedges	170 g 120g	160ml 105ml	150ml 100ml
	Thurs	Beef Lasagne	240g	270ml	250ml
	Frid	Macaroni Cheese	250 g	270ml	250ml
	Sat	Minced Beef Mashed Potato	140g 80g	200ml 65ml	190ml 60ml
	Sun	Pizza	147g	270ml	250ml
Week 2	Mon	Ravioli	220g	270ml	250ml
	Tues	Minced Beef Mashed Potato	140g 80g	200ml 65ml	190ml 60ml
	Wed	Stewed steak (no pastry) Mashed Potato	240g 80 g	200ml 65ml	190ml 60ml
	Thurs	Sweet and Sour Pork Rice	170g 80g	200ml 65ml	190ml 60ml
	Fri	Beef Lasagne	240g	270ml	250ml
	Sat	Macaroni Cheese	250 g	270ml	250ml
	Su	Chicken Mushroom in Pepper sauce Roast Potatoes	160g 140g	130ml 135ml	125ml 130ml

Appendix 7. Food and Fluid trackers

Patient Name_____ **Chi**_____

Please complete daily and document all food and fluid intake by ticking boxes to indicate how much has been consumed, or replacement supplement taken. Please also give accurate description of food/fluid.

Day_____ **Date**_____ Supplement **Day**_____ **Date**_____ Supplement

Breakfast	Nil	¼	½	¾	All	Vol	Vol		**Breakfast**	Nil	¼	½	¾	All	Vol	Vol
Fluid (200ml)									Fluid (200ml)							
Morning Snack									**Morning Snack**							
Fluid (200ml)									Fluid (200ml)							
Lunch									**Lunch**							
Fluid (200ml)									Fluid (200ml)							
Afternoon Snack									**Afternoon Snack**							
Fluid (200ml									Fluid (200ml)							
Dinner									**Dinner**							
Fluid (200ml)									Fluid (200ml)							
Evening snack									**Evening snack**							
Extra Fluids									Extra Fluids							

Supplement Name

Supplement Name

Appendix 8

Care Plan for management of NG feeding requiring safe holding within Royal Hospital for Children - Acute Paediatric Wards.

The process of hands on intervention (detailed in 'During Intervention' section) should only commenced following the young person having been offered food for the agreed duration as per their individualised care plan and supplements being offered for the agreed duration with no compliance. NB. 'Before Intervention' preparation should be commenced in advance in place prior to mealtime.
This care plan should ONLY be actioned following direct discussion with Consultant Psychiatrist (day-time or on-call) immediately following refusal of food/supplements under the auspices of the Mental Health (Care and Treatment) (Scotland) Act 2003. To be reviewed on a meal by meal basis.

Before Intervention:

1. Prior to any hands on intervention immediate risk assessment of ward environment and safe, appropriate location identified and prepared for intervention (feeding area should also be prepared at this time for possibility of safe hold intervention).
2. Ensure correct chair is available and accessible in advance.
3. In first instance, four RMN/RLDN/CSW staff identified with up to date training in safe holding – all staff involved in each restraint should have same safe hold training. At no time should staff without appropriate safe hold training be involved in a planned restraint for NG feeding.
4. Paediatric ward nurse should be identified to pass NG tube – should be made available at required time.
5. Decision made as to which of the four identified safe holding staff will lead on restraint and intervention. Senior member of identified safe holding staff to be recognised as 'lead' on restraint; including verbal instruction, ongoing environmental assessment, patient and staff safety.
6. Supplements to be offered as an alternative, should be prepared and measured out prior to any safe hold team members entering the room. At this time all other foodstuffs should be removed.
7. Ward area to be minimised – e.g. patients in nearby rooms with doors and blinds closed where possible. Ward staff notified to keep area as clear of traffic as possible.

During Intervention:

1. Following allotted time frame of refusal of food and allotted time frame of supplement refusal, young person will be advised that progression to NG feeding is next step. Request made for young person to voluntarily move to previously identified appropriate place for intervention.
2. In instance of refusal to voluntarily move to appropriate place, feeding area should be utilised for safe hold intervention, this will avoid increased stress for patient and wider ward environment that would occur during assisted transfer to previously identified room.
3. Two safe hold trained members of staff will enter with identified therapist clinician and ward nurse, during which time supplements should continue to be offered by the therapist clinician. Other two safe hold staff to remain outside of room, observing from distance. No other staff to be present in room other than identified staff.
4. Should refusal continue, staff to move to 2 person safe hold for prior planned NG tube to be passed.
5. Should young person continue to resist, additional two safe hold staff to enter and move to 3 or 4 person safe hold – immediate assessment of need by 'lead' safe hold staff member who will communicate further staff instruction.
6. In instance of continued refusal, safe hold staff will resume restraint and NG tube to be passed by identified ward nurse.
7. Following delivery of nutrition by NG tube, hold will be de-escalated and staff to disengage. Therapist clinician to provide ongoing therapeutic support to young person following intervention.
8. If at any point, there is uncertainty over management within the team enacting this care plan, the responsible consultant psychiatrist (paediatric liaison within hours and 3rd on call out of hours) is to be contacted for advice.

After Intervention:

1. Datix to be completed by member of safe hold staff.
2. Emis entry containing nutritional information to be completed by therapist clinician.
3. Full collective debrief session planned for all staff involved in intervention.

Appendix 9. Flowchart for CAMHS staff to accompany the CAMHS RHC ED pathway for low weight eating disorder-.
Aims: 14 day admission = medical stabilisation & enabling carers to take central role in their Childs recovery on D/C home.