

CR162



MARSIPAN: Management of Really Sick Patients with Anorexia Nervosa

October 2010

CR168



Junior MARSIPAN: Management of Really Sick Patients under 18 with Anorexia Nervosa

January 2012

COLLEGE REPORT

Medical Emergencies in Eating Disorders: Guidance on Recognition and Management

(Replacing MARSIPAN and Junior MARSIPAN)

May 2022

COLLEGE REPORT CR233



Simon Chapman



Lee Hudson

Guidance on Recognising and Managing Medical Emergencies in Eating Disorders

(Replacing MARSIPAN and Junior MARSIPAN)

Annexe 3: Type 1 diabetes and eating disorders (TIDE)

May 2022

Medical Emergencies in Eating Disorders

(Replacing MARSIPAN and Junior MARSIPAN)

Annexe 2: What our National Survey found about local implementation of MARSIPAN recommendations

May 2022

Guidance on Recognising and Managing Medical Emergencies in Eating Disorders

(Replacing MARSIPAN and Junior MARSIPAN)

Annexe 1: Summary sheets for assessing and managing patients with severe eating disorders

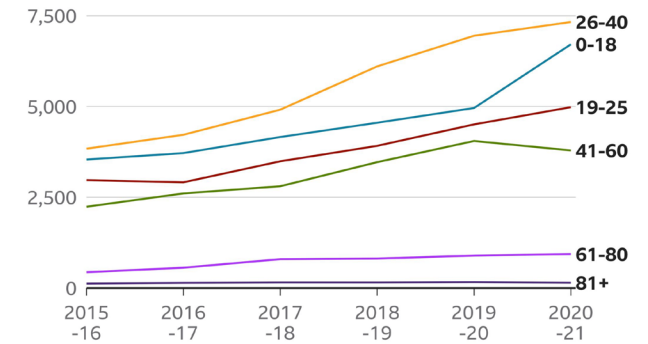
May 2022

- 2008 ◆ Case presented at the BAPEN conference highlighted the need for guidance in the acute medical management of people with anorexia
- 2010 ■ 'MARSIPAN: Management of Really Sick Patients with Anorexia Nervosa' for adults is published
- 2012 ■ 'Junior MARSIPAN: Management of Really Sick Patients under 18 with Anorexia Nervosa' is published
- 2014 ■ Second edition of 'MARSIPAN: Management of Really Sick Patients with Anorexia Nervosa' for adults is published
- 2017 ◆ PHSO report 'Ignoring the alarms: How NHS eating disorder services are failing patients' is published
- 2019 □ Work begins on a review and update to guidance
 - to integrate adult and children and young people
 - to widen scope to other eating disorders
- 2021 □ Research and guidance development continue:
 - NCCMH review of eating disorder guidelines
 - Expert reference group meetings
- 2022 ■ New 'Medical Emergencies in Eating Disorders: Guidance on Recognition and Management' is published, superseding previous versions

Key: BAPEN = British Association for Parenteral and Enteral Nutrition, NCCMH = National Collaborating Centre for Mental Health, PHSO = Parliamentary and Health Service

Hospital admissions for eating disorders rising in children and younger adults

Number of hospital admissions by age group



Numbers represent hospital admissions and not the number of people admitted, as the same person can be admitted to hospital more than once

Source: NHS

BBC

“ We found that all the NHS organisations involved in Averil’s care and treatment between her discharge from hospital on 2 August 2012 and her tragic death five months later on 15 December 2012 failed her in some way. We found her deterioration and death were avoidable.”

2017



2022





Junior MaRSiPAN app



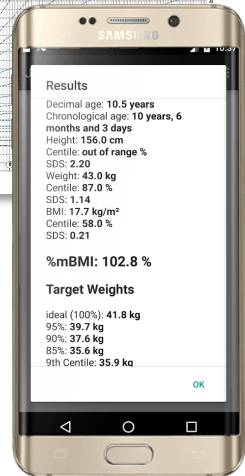
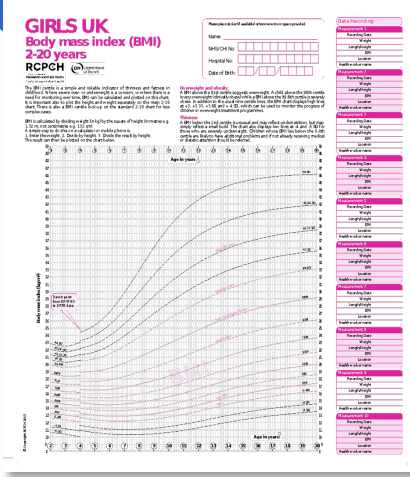
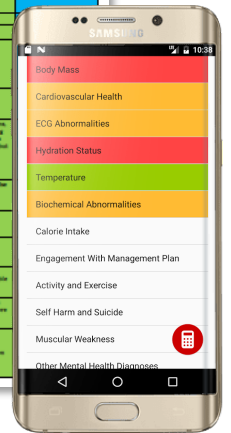
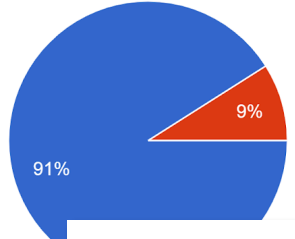
Unlock code:
DrFrasierCrane



	RED (High risk)	AMBER (Medium risk)	GREEN (Low risk)	BLUE (Very low risk)
Body mass	Percentage Median BMI (not weight) 10% or above (not weight) (Appropriate to follow 9-10% BMIs)	Percentage Median BMI 10-20% (Appropriate to follow 9-10% BMIs)	Percentage Median BMI 20-25% (Appropriate to follow 9-10% BMIs)	Percentage Median BMI 25-30% (Appropriate to follow 9-10% BMIs)
Cardiovascular Health	Heart rate (bpm) >100 bpm High blood pressure Diabetes High cholesterol Smoking Family history of heart disease Regular team (GP, dietitian and nurse) advice/monitoring	Heart rate (bpm) >100 bpm High blood pressure Diabetes High cholesterol Smoking Family history of heart disease Regular team (GP, dietitian and nurse) advice/monitoring	Heart rate (bpm) >100 bpm High blood pressure Diabetes High cholesterol Smoking Family history of heart disease Regular team (GP, dietitian and nurse) advice/monitoring	Heart rate (bpm) >100 bpm High blood pressure Diabetes High cholesterol Smoking Family history of heart disease Regular team (GP, dietitian and nurse) advice/monitoring
Endocrine Issues	Diabetes Hypothyroidism Hyperthyroidism Hypoparathyroidism Hypoadrenalism Hypogonadism Hypopituitarism Hypoparathyroidism Hypoadrenalism Hypogonadism Hypopituitarism	Diabetes Hypothyroidism Hyperthyroidism Hypoparathyroidism Hypoadrenalism Hypogonadism Hypopituitarism	Diabetes Hypothyroidism Hyperthyroidism Hypoparathyroidism Hypoadrenalism Hypogonadism Hypopituitarism	Diabetes Hypothyroidism Hyperthyroidism Hypoparathyroidism Hypoadrenalism Hypogonadism Hypopituitarism
Hydration Status	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake
Temperature	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake
Biomedical Abnormalities	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake
Biomedical monitoring	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake
Engagement with management plan	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake
Activity and exercise	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake
Self-harm and suicide	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake
Other mental health concerns	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake
Reproductive issues	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake
Other	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake	High risk of dehydration Low fluid intake High fluid intake High risk of dehydration Low fluid intake High fluid intake

Does the Junior MARSIPAN risk assessment tool guide your decision admit to inpatient care?

89 responses



Risk Assessment Tool™ Percentage Median BMI Calculator™

MaRSiPAN to MEED: What is new?

Across ages

Diabetes




Refeeding guidance




Legal framework

It is important to note that risk parameters for adults cannot be applied to children and young people without adjustment for age and gender.

This is a guide to risk assessment and cannot replace proper clinical evaluation. However, a patient with one or more red ratings or two or more amber ratings should probably be considered high risk.

Table 1 Risk assessment framework for assessing impending risk to life

	 Red: High impending risk to life	 Amber: Alert to high concern for impending risk to life	 Green: Low impending risk to life
Medical history and examination			
Weight loss	Recent loss of weight of 11kg/week for 2 weeks (consecutive) in an undernourished patient ³⁴ Rapid weight loss at any weight, e.g. in obesity or ARFID	Recent loss of weight of 500–999g/week for 2 consecutive weeks in an undernourished patient ²⁶	Recent weight loss of <500g/week or fluctuating weight
BMI and weight	<ul style="list-style-type: none"> Under 18 years: m%BMI³⁵ <70% Over 18: BMI <13 	<ul style="list-style-type: none"> Under 18: m%BMI 70–80% Over 18: BMI 13–14.9 	<ul style="list-style-type: none"> Under 18: m%BMI >80%³⁶ Over 18: BMI >15
HR (awake)	<40	40–50	>50
Cardio-vascular health ^{37, 38}	Standing systolic BP below 0.4th centile for age or less than 90 if 18+, associated with recurrent syncope and postural drop in systolic BP of >20mmHg or increase in HR of over 30bpm (35bpm in <16 years)	Standing systolic BP <0.4th centile or <90 if 18+ associated with occasional syncope; postural drop in systolic BP of >15mmHg or increase in HR of up to 30bpm (35bpm in <16 years)	<ul style="list-style-type: none"> Normal standing systolic BP for age and gender with reference to centile charts Normal orthostatic cardiovascular changes Normal heart rhythm

	 Red: High impending risk to life	 Amber: Alert to high concern for impending risk to life	 Green: Low impending risk to life
Assessment of hydration status	<ul style="list-style-type: none"> Fluid refusal Severe dehydration (10%): reduced urine output, dry mouth, postural BP drop (see above), decreased skin turgor, sunken eyes, tachypnoea, tachycardia 	<ul style="list-style-type: none"> Severe fluid restriction Moderate dehydration (5–10%): reduced urine output, dry mouth, postural BP drop (see above), normal skin turgor, some tachypnoea, some tachycardia, peripheral oedema 	<ul style="list-style-type: none"> Minimal fluid restriction No more than mild dehydration (<5%): may have dry mouth or concerns about risk of dehydration with negative fluid balance
Temperature	<35.5°C tympanic or 35.0°C axillary	<36°C	>36°C
Muscular function ³⁹ : SUSS Test	Unable to sit up from lying flat, or to get up from squat at all or only by using upper limbs to help (Score 0 or 1)	Unable to sit up or stand from squat without noticeable difficulty (Score 2)	Able to sit up from lying flat and stand from squat with no difficulty (Score 3)
Muscular function: Hand grip strength ⁴⁰	Male <30.5kg, Female <17.5kg (3rd percentile)	Male <38kg, Female <23kg (5th percentile)	Male >38kg, Female >23kg
Muscular function: MUAC ⁴¹	<18cm (approx. BMI<13)	18–20cm (approx. BMI<15.5)	>20cm (approx. BMI >15.5)
Other clinical state	Life-threatening medical condition, e.g. severe haematemesis, acute confusion, severe cognitive slowing, diabetic ketoacidosis, upper gastrointestinal perforation, significant alcohol consumption	Non-life-threatening physical compromise, e.g. mild haematemesis, pressure sores	Evidence of physical compromise, e.g. poor cognitive flexibility, poor concentration



Red: High impending risk to life



Amber: Alert to high concern for impending risk to life



Green: Low impending risk to life

ECG abnormalities	<ul style="list-style-type: none"> • <18 years: QTc >460ms (female), 450ms (male) • 18+ years: QTc >450ms (females), 430ms (males) • And any other significant ECG abnormality 	<ul style="list-style-type: none"> • <18 years: QTc >460ms (female), 450ms (male) • 18+ years: QTc >450ms (females), >430ms (males). • And no other ECG anomaly • Taking medication known to prolong QTc interval 	<ul style="list-style-type: none"> • <18 years: QTc <460ms (female), 450ms (male) • 18+ years: QTc <450ms (females), <430ms (males)
Biochemical abnormalities⁴²	<ul style="list-style-type: none"> • Hypophosphataemia and falling phosphate • Hypokalaemia (<2.5mmol/L) • Hypoalbuminaemia • Hypoglycaemia (<3mmol/L) • Hyponatraemia • Hypocalcaemia • Transaminases >3x normal range • Inpatients with diabetes mellitus: HbA1C >10% (86mmol/mol) 		
Haematology	<ul style="list-style-type: none"> • Low white cell count • Haemoglobin <10g/L 		
Disordered eating behaviours	Acute food refusal or estimated calorie intake <500kcal/day for 2+ days		



Red: High impending risk to life



Amber: Alert to high concern for impending risk to life



Green: Low impending risk to life

Engagement with management plan	<ul style="list-style-type: none"> • Physical struggles with staff or parents/carers over nutrition or reduction of exercise • Harm to self • Poor insight or motivation • Fear leading to resistance to weight gain • Staff or parents/carers unable to implement meal plan prescribed 	<ul style="list-style-type: none"> • Poor insight or motivation • Resistance to weight gain • Staff or parents/carers unable to implement meal plan prescribed • Some insight and motivation to tackle eating problems • Fear leading to some ambivalence but not actively resisting 	<ul style="list-style-type: none"> • Some insight and motivation to tackle eating problems • May be ambivalent but not actively resisting
Activity and exercise	High levels of dysfunctional exercise in the context of malnutrition (>2h/day)	Moderate levels of dysfunctional exercise in the context of malnutrition (>1h/day)	Mild levels of or no dysfunctional exercise in the context of malnutrition (<1h/day)
Purging behaviours	Multiple daily episodes of vomiting and/or laxative abuse	Regular (=>3x per week) vomiting and/or laxative abuse	
Self-harm and suicide	Self-poisoning, suicidal ideas with moderate to high risk of completed suicide	Cutting or similar behaviours, suicidal ideas with low risk of completed suicide	

Key: °C = degrees Celsius; ARFID = avoidant restrictive food intake disorder; BMI = body mass index; BP = blood pressure; bpm = beats per minute; cm = centimetre; ECG = electrocardiogram; g = grams; h = hour; HR = heart rate; kcal = kilocalories; kg = kilogram; L = litre; mmHg = millimetres of mercury; mmol = millimole; mol = mole; ms = millisecond; QTc = corrected QT interval; SUSS Test = Sit Up-Stand-Squat Test.

CR162



MARSIPAN: Management of Really Sick Patients with Anorexia Nervosa

October 2010

CR168



Junior MARSIPAN: Management of Really Sick Patients under 18 with Anorexia Nervosa

January 2012

COLLEGE REPORT

Medical Emergencies in Eating Disorders: Guidance on Recognition and Management

(Replacing MARSIPAN and Junior MARSIPAN)

May 2022

COLLEGE REPORT CR233



Simon Chapman



Lee Hudson

Guidance on Recognising and Managing Medical Emergencies in Eating Disorders

(Replacing MARSIPAN and Junior MARSIPAN)

Annexe 3: Type 1 diabetes and eating disorders (TIDE)

May 2022

Medical Emergencies in Eating Disorders

(Replacing MARSIPAN and Junior MARSIPAN)

Annexe 2: What our National Survey found about local implementation of MARSIPAN recommendations

May 2022

Guidance on Recognising and Managing Medical Emergencies in Eating Disorders

(Replacing MARSIPAN and Junior MARSIPAN)

Annexe 1: Summary sheets for assessing and managing patients with severe eating disorders

May 2022