Table of Contents

1.0 PRACTICE STANDARD ........................................................................................................... 2
2.0 DEFINITIONS AND ABBREVIATIONS .................................................................................. 2
3.0 EQUIPMENT ............................................................................................................................ 4
4.0 PROCEDURE ........................................................................................................................ 4
   Planned Admission: .................................................................................................................. 4
   On Admission: .......................................................................................................................... 5
   Medical Management .............................................................................................................. 6
   Behavioural Management ........................................................................................................ 6
5.0 DOCUMENTATION CONSIDERATIONS .............................................................................. 9
6.0 SPECIAL CONSIDERATIONS ............................................................................................... 10
7.0 REFERENCES ....................................................................................................................... 10
8.0 DEVELOPED BY .................................................................................................................. 11
9.0 REVISED BY ....................................................................................................................... 11
10.0 REVIEWED BY ................................................................................................................... 11
11.0 ENDORSED BY .................................................................................................................. 12
APPENDIX A:  KEY PHYSICAL ASSESSMENT PARAMETERS AND ACTION POINTS FOR ADULTS ...... 13
APPENDIX B:  KEY PHYSICAL ASSESSMENT PARAMETERS AND ACTION POINTS FOR YOUNGER
   PATIENTS .................................................................................................................................. 15
APPENDIX C: RE-FEEDING GUIDELINES BASED ON SEVERITY INDICATORS ............................. 18
APPENDIX D: PEDIATRIC RE-FEEDING GUIDELINES ................................................................. 19
APPENDIX E:  NASOGASTRIC RE-FEEDING CONSIDERATIONS .................................................. 20
APPENDIX F: ACUTE CARE: EATING DISORDER RESOURCE LIST ............................................ 20
1.0 **PRACTICE STANDARD**

**Purpose:**
To ensure a standardized approach for the multidisciplinary team to provide effective, coordinated care for patients with eating disorders in need of medical stabilization related to malnutrition or secondary to compensatory behaviours.

**Background:**
Eating Disorders are serious and complex conditions that negatively impact every aspect of an individual’s life. They are complex dysfunctions of the central nervous system involving neurochemical and structural differences in the brain that drive distorted thoughts, intense emotions and maladaptive behaviours which can improve with nutrition, emotion regulation skills and validating environments. Eating disorders can involve a number of complications and with more severe and long lasting illnesses can be fatal. Due to a high level of ambivalence for change, lack of feelings of fulfillment or control, denial and fear of negative consequences experienced by people with eating disorders, (Harrison, 2013) treatment of the disorders can be challenging.

Inpatient care and treatment with a focus on medical stabilization is recommended for individuals with eating disorders who are at short or long term risk of harm unless their medical complications are addressed immediately. Numerous factors and conditions influence patients’ risk level including age of onset, rate and degree of weight loss, chronicity, ethnicity, comorbid conditions and medication.

**Standard:**
All patients with an eating disorder in need of medical stabilization will:

- Be admitted to a designated unit in **designated hospitals**
- Receive one to one added care for meal supervision throughout their admission. (refer to 4.4.4)

Designated hospitals and units will have the following minimum service provisions:

- Physician, Paediatrician or Psychiatrist with expertise in eating disorder management
- Nursing, Social Work and/or other Allied Health staff with a working knowledge of eating disorders
- Psychiatric and/or Paediatric teams that can provide support and liaison to nursing staff
- Dietitian with expertise in eating disorders to implement and oversee meal plan

All clinicians caring for patients with eating disorders must be competent to enact any care outlined in this document, and practice within their scope of practice. Refer to competencies (in progress).

2.0 **DEFINITIONS AND ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>APN:</td>
<td>Aboriginal Patient Navigator</td>
</tr>
<tr>
<td>BC CPG:</td>
<td>British Columbia Clinical Practice Guidelines</td>
</tr>
<tr>
<td>Community MHSU Services:</td>
<td>Community Eating Disorder Program (EDP) or Community Mental Health and Substance Use (MHSU) or Child and Youth Mental Health (CYMH) services.</td>
</tr>
<tr>
<td>Confabulation:</td>
<td>Unconscious filling in of gaps in memory with fabricated facts and experiences</td>
</tr>
</tbody>
</table>
CYMH: Child and Youth Mental Health is a component of the Ministry for Children and Family Development and responsible for services to Children and Youth under the age of 19 with Mental Health concerns.

EDP:: Eating Disorder Program and services vary for each community in the Interior, ranging from general Mental Health and Substance Use community services to full interdisciplinary Community Eating Disorder Program (EDP) i.e. Kamloops and Kelowna.

ETOH: Alcohol

GP/FP/NP: General Practitioner/Family Practitioner/Nurse Practitioner

IDT: Interdisciplinary Team

LPN/RN/RPN: Licenced Practical Nurse/Registered Nurse/Registered Psychiatric Nurse

MHA: Mental Health Act

MHSU: Mental Health and Substance Use

MRP: Most Responsible Practitioner

NRT: Nicotine Replacement Therapy

Patient: For the purpose of this document patient refers to acute care patient and community client.

PCC: Patient Care Coordinator

Pediatric: Care of a child from 1 month up to 18 years

Information specific to the Pediatric population within this document is identified by this symbol and highlighted in grey.

PoC: Plan of Care

PT: Physiotherapy

SCOFF: Screening Assessment Tool for Eating Disorders

Splitting: Behaviour that provokes a split in the hospital team in relation to patient care

SW: Social Work(er)

Treatment Non-Negotiables: Therapeutic boundaries necessary to ensure a therapeutic environment, patient safety and most efficient use of intensive treatment resources. The characteristics of sound therapeutic boundaries include: Providing ample advance warning, Having a sound rationale that is explained to the patient, Implementing treatment non-negotiables consistently, and Maximizing patient autonomy. Research has shown that therapeutic boundaries are considered most acceptable and effective when delivered using a collaborative style. (2012, BC Ministry of Health).

Triangulation: Occurs when a person intervenes or is drawn into a conflicted or stressful relationship in an attempt to ease tension and facilitate communication between other parties.
3.0 **EQUIPMENT**

- Eating Disorder Planned Admission Form (Adult) ([822924](#))
- Eating Disorder Planned Admission Form (Pediatric) ([822933](#))
- Eating Disorder Pre-Printed Order (Adult Admission) ([801108](#))
- Eating Disorder Pre-Printed Order (Pediatric Admission) ([829741](#))
- Admission History Adult 18 years and older ([826175](#))
- Admission History Paediatric 0-17 years ([814472](#))
- Addendum to Admission History for Eating Disorders ([822938](#))
- Eating Disorder Plan of Care (Adult) ([855123](#))
- 24-Hour Patient Care Flow Sheet, Acute Care – Adult Eating Disorder ([826456](#))
- **Acute Care: Meal Support Resource**
- Pediatric Early Warning Signs (**PEWS**) ([822935](#))
- Eating Disorder Kardex ([822054](#))

4.0 **PROCEDURE**

4.1 **Planned Admission:**

4.1.1 Community Services Clinician Responsibility:

- Consult with General Practitioner (GP), Family Practitioner (FP), Nurse Practitioner (NP) and/or Psychiatrist
- GP/FP/NP follows site specific direct admission process e.g. finding an accepting Most Responsible Physician (MRP)
- If indicated use the Mental Health Act (MHA) for involuntary admission. (refer to MHA Toolkit)
- Complete Eating Disorder Planned Admission form (Adult)
- Complete Eating Disorder Planned Admission Form (Pediatric)
- Contact the Patient Care Coordinator (PCC) on the designated unit to discuss plan for admission.

4.1.2 Acute responsibility:

- PCC supports site specific admission process, e.g. contact shift coordinator, inform dietitian, add to waitlist, complete referrals (i.e. Aboriginal Patient Navigator (APN), Physiotherapy (PT) etc.) as indicated.
- PCC, or delegate, in collaboration with Community Clinician, plans an Interdisciplinary team (IDT) meeting.
Mental Health & Substance Use Practices

Clinical Practice Standard and Procedure

Eating Disorder Management: Acute Care

April 2017 Page 5 of 20

• Ideally, an IDT meeting will be organized prior to admission but, at minimum, should be arranged within 48 hours of admission.
  ▪ Purpose: To ensure understanding of precipitating events, current treatment plan including “treatment non-negotiables”, and goals of admission.
  ▪ Membership: may include but is not limited to, GP/FP/NP, EDP or MHSU, CYMH and the acute care team that may include, but is not limited to, the admitting physician, PCC on the receiving unit, dietitian, SW, APN, acute care mental health nurse, Psychiatrist, Pharmacy, primary nurse etc.
  ▪ As appropriate include patient and/or family member to provide collateral and assist with treatment planning.

4.1.3 Patient will be admitted directly to the designated unit, when bed available.

4.1.4 PCC arranges 1:1 added care (within arm’s reach days and evenings and PRN at night)
  ▪ For meal supervision refer to 4.4.4
  ▪ Assess need for - constant observation of patient, preferably by a Licensed Practical Nurse/Registered Nurse/Registered Psychiatric Nurse (LPN/RN/RPN)

4.1.5 Prepare room prior to patient admission.
  ▪ When possible, select appropriate room locations with consideration of care plan requirements.
  ▪ Bathroom door to remain locked at all times, when possible.
  ▪ Remove garbage cans/bags from bedside and room, if possible.
  ▪ Remove or lock all sharps containers, if possible.
  ▪ Remove drinking cups, if possible.

4.2 On Admission:

4.2.1 Establish a relationship with the patient that is safe, accepting, confidential within the care team, reliable, and consistent with appropriate and clear boundaries.
  ▪ Effective treatment requires a balance between attending to therapeutic alliance and clear boundaries to ensure patient safety.
  ▪ All admissions should be co-managed by medical and psychiatric personnel

4.2.2 Initiate Eating Disorder Pre-Printed Order
  ▪ Adult Admission (# 801108) or
  ▪ Pediatric Admission (# 829741)

Admit patients to the designated unit at the specific site:

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Designated Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelowna General Hospital</td>
<td>5B</td>
</tr>
<tr>
<td>Royal Inland Hospital</td>
<td>4N</td>
</tr>
<tr>
<td>Vernon Jubilee Hospital</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>Penticton Regional Hospital</td>
<td>To be determined</td>
</tr>
</tbody>
</table>
4.2.3 Complete Nursing Admission History:
- [Nursing Admission History Adult](#) and the [Addendum to Admission History for Patients with Eating Disorders](#). Addendum not to be given to the patient to complete.
- Complete [Nursing Admission History Pediatric](#) and the [Addendum to Admission History for Patients with Eating Disorders](#). Addendum not to be given to the patient to complete.
- Consider use of the Eating Disorder Kardex (822054) (Adult use optional)

4.2.4 Assess for acute psychiatric crisis,
- Suicidal ideation;
- Overdose/any attempts at self-harm;
- Exacerbation of psychiatric co-morbid symptoms that require acute intervention.

If there is an acute psychiatric crisis, contact the Psychiatrist On-Call for immediate assessment and psychiatric stabilization. If on-call psychiatrist not available, follow site specific procedures for psychiatric consultation.

4.2.5 Initiate [Quick Reference Guide for the Admission of a Patient with an Eating Disorder](#).
- Plan [IDT meeting](#) to occur within 3-4 days of admission.
- Initiate the [24-Hour Patient Care Flow Sheet Acute Care – Adult Eating Disorders](#)
- Pediatric – Initiate the [Pediatric Early Warning Signs (PEWS) flow sheet](#)

4.3 **Medical Management**

4.3.1 Refer to the following best practice standards:
- [Appendix A](#) – Key Physical Assessment Parameters and Action Points for Adults.
- [Appendix B](#) – Key Physical Assessment Parameters and Action Points for Younger Patients.

4.3.2 Re-feeding:
Refer to the following best practice standards;
- [Appendix C](#) – Re-Feeding Guidelines Based on Severity Indicators.
- [Appendix D](#) – Re-Feeding Guidelines for Pediatrics
- [Appendix E](#) – Nasogastric Re-Feeding Considerations.

4.4 **Behavioural Management**

4.4.1 Schedule weekly IDT meetings, and PRN as needed:
Purpose: to review and adapt the care plan with clear, well-developed goals and discharge/transition plan.
Membership: may include, but is not limited to, GP/FP/NP, EDP or MHSU, CYMH and the acute care team that may include, but is not limited to the admitting physician, PCC, dietitian, SW, acute care mental health nurse, psychiatrist, pharmacy, primary nurse, APN etc. As appropriate, include patient and/or family member to provide collateral and assist with treatment planning.

4.4.2 Approach:
- Ensure a firm but supportive approach
- Maintain a non-judgemental attitude
- Utilize a trauma informed, culturally competent and safe approach
- Maintain continuity of care
- Actively engage and respect the concerns of family/care providers/significant others
- Provide family/care providers/significant others with support and information
- Do not make assumptions about the role of the family/care providers/significant others in the development of eating disorders
- Involve family/care providers/significant others as much as possible, as appropriate with consent of patient, in planning/providing care for example, providing meal support

4.4.3 Plan of Care (PoC):

PoC is individualized for each patient in relation to their medical condition, comorbidities, emotional readiness and supports available and must be updated after every IDT meeting, or as needed.

- The individualized PoC should include progressions related to: nutrition, elimination, medical monitoring, activity level, level of monitoring/supervision needed, family or other support involvement, passes, and other areas as appropriate.

Include clearly documented expectations and management of specific weight loss behaviours.

4.4.4 Meal Support:

Supervision required for meal support, by staff or family/care provider as appropriate:
- 30 mins during meals and 20 mins during snacks; and 60 mins post-meal and 30 mins post-snack,
- Meal Replacement, to be decided by staff and supervised by staff and/or family/care provider:
  - Remove supplements from meal tray and place in fridge with patient identifier label
  - Assess intake to decide nutritional supplementation required:
    - If patient completes 100% of meal, no supplementation required.
If patient completes 50 - 99% of meal, supplement with 120mL Ensure Plus®

If patient completes 0 - 49% of meal, supplement with 235mL Ensure Plus®

If patient completes 0 - 99% of snack, supplement with 120mL Ensure Plus®

- Provide patient 5 mins to complete supplementation.
- Document food and fluid intake, length of time to complete, interventions utilized and effectiveness, and meal replacement/supplementation provided if meal or snack is not completed.
- Monitor for specific weight loss behaviours.
- Refer to Acute Care: Meal Support Resource and Appendix F: Acute Care: Eating Disorder Resources.
- Educate and support family/care providers/significant others on meal support using the Acute Care: Meal Support Resource and Appendix F: Acute Care: Eating Disorder Resources.

4.4.5 Weighing:

Weigh as per PoC.

To minimize weight fluctuations unrelated to nutritional changes:

- Weigh in underclothes and hospital gown or personal pajamas only, with back to the scale and at the same time in the morning, before breakfast and after emptying bladder.
- Restrict patient access to scales between weigh-ins, do not disclose the weight to the patient or engage in discussion about weight.

4.4.6 Time off Ward and Privileges:

Careful consideration should be given before permitting passes off the medical ward, as time off the ward may present opportunities to engage in weight loss behaviours.

- Take into account patient’s physical status, potential harmful behaviours and opportunities to purge food, water load or to expend energy.
- If time off ward is appropriate and ordered by a physician, consider accompanying patient in a wheelchair for a short period.

Use of cell phones and other social media platforms are not recommended.

- Remove patient cell phone and other social media devices and store as per IH policy AK0700 Client Valuables & Personal Effects.
- Access to electronics should be determined by the IDT.

The IDT should address additional privileges.

4.4.7 Violent and disturbing behavior: (refer to Universal Precautions for Providing Care to Aggressive Patients)

Violent and disturbing behaviour should be discussed with psychiatric services to determine additional actions and resources required.
Be aware of splitting and triangulation as this can result in team frustration.

- Conduct brief conferences to plan treatment and reach consensus about what simple and truthful messages will be given to the patient. Limit changes in the plan of care unless the team is involved and informed.
- Use consistent personnel whenever possible.
- Resist requests by patients for specific nurses unless warranted from the unit perspective.
- Do not argue or become defensive.
- Calmly and firmly repeat the set and agreed upon limits.
- Teams may need additional psychiatric support when caring for patients with eating disorders to ensure quality, ethical care.

4.4.8 Transfer or Discharge:

Admissions should be kept as short as possible.

Every time the IDT meets, including the first week of admission, the process of discharge planning should be discussed.

- Premature discharge should be avoided.
- Patients are ready for discharge when the goals of admission have been reached and they are medically stable. It is recommended that patients remain on the unit if one risk factor (e.g. low potassium) has improved but others have not (MARSIPAN, 2010).
- If the patient’s clinical concerns are not resolving, it may be appropriate to transfer the patient to a specialized unit or to a higher level of care.
  - If a higher level care is not available immediately:
    - Consult with the tertiary specialist Eating Disorder team;
      - St. Paul’s Hospital – 1(604)806-8654
      - BC Children’s Hospital – Eating Disorder Program
    - Continue regular meetings between medical, nursing staff and liaison psychiatry staff;
    - Create a communication sheet with telephone numbers and contact information of the medical physician, liaison psychiatrist and Eating Disorder specialist consultant should an emergency arise.

Disclaimer: The procedure steps may not depict actual sequence of events. Patient/Client/Resident specifics must be considered in applying Interior Health Clinical Practice Decision Support Tools

5.0 DOCUMENTATION CONSIDERATIONS

- Document admission as per IH standard process: Admission, Acute Care
- Ensure detailed and clear communication and handover between all staff, including Plan of Care.
- Ensure detailed documentation of pertinent medical and behavioural information as per doctor’s orders, e.g. input/output, amount of food ingested and length of time to completion, mood etc.
Relevant documentation to be completed as detailed in above procedures:

- Eating Disorder Planned Admission Form (Adult) (822924)
  - Eating Disorder Planned Admission Form (Pediatric) (822933)
  - Eating Disorder Pre-Printed Order (Adult Admission) (801108)
  - Eating Disorder Pre-Printed Order (Pediatric Admission) (829741)
  - Admission History Adult 18 years and older (826175)
  - Admission History Paediatric 0-17 years (814472)
  - Addendum to Admission History for Eating Disorders (822938)
  - Eating Disorder Plan of Care (Adult) (855123)
  - 24-Hour Patient Care Flow Sheet, Acute Care – Adult Eating Disorder (826456)
  - Acute Care: Meal Support
  - Pediatric Early Warning Signs (PEWS)
  - Eating Disorder Kardex (822054)
  - Daily Charting
  - IDT meeting notes

6.0 SPECIAL CONSIDERATIONS

6.1 Unplanned/Emergency Admission

In certain circumstances, when a patient has not had a planned admission, complete the following:

- Initiate the Adult Eating Disorders BC’s Community Hospital Guideline: Recommended care of the patient with an Eating Disorder in the Emergency Room.
- Initiate the Pediatric Eating Disorders BC’s Provincial Community Hospital Guidelines: Recommended care of the patient with an Eating Disorder in the Emergency Room to determine care needs.
- When admission is indicated, follow site specific admission processes
- Refer to section 4.3 Admission Procedure

7.0 REFERENCES


Eating Disorder Management: Acute Care

April 2017

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9.0 REVISED BY

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Mental Health & Substance Use Practices

Clinical Practice Standard and Procedure

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11.0  ENDORSED BY

Aneta D’Angelo, Regional Practice Leader on behalf of Glenn McRae, Chief Nursing Officer & Professional Practice Lead [April 25, 2017]
**APPENDIX A:**

**Key Physical Assessment Parameters and Action Points for Adults**

<table>
<thead>
<tr>
<th>Assess</th>
<th>What to look for</th>
<th>High Risk</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart rate</td>
<td>Bradycardia</td>
<td>HR less than 40 bpm</td>
<td>Nutrition</td>
</tr>
<tr>
<td></td>
<td>Postural tachycardia</td>
<td>Symptomatic postural tachycardia</td>
<td>ECG</td>
</tr>
<tr>
<td>ECG</td>
<td>Alternate cause for bradycardia (e.g. heart block)</td>
<td>Prolonged QTc</td>
<td>Nutrition and correct electrolyte abnormalities</td>
</tr>
<tr>
<td></td>
<td>Arrhythmia</td>
<td>Arrhythmia associated with malnutrition &amp; electrolyte disturbances</td>
<td>QTc greater than 450msec: bed rest, consult cardiologist</td>
</tr>
<tr>
<td></td>
<td>Check QTc time (use Bazzet's formula <strong>)</strong></td>
<td>Greater than .04 milliseconds between QT intervals</td>
<td>Medication unlikely to be helpful unless symptomatic or tachycardic.</td>
</tr>
<tr>
<td></td>
<td>Check electrolytes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>QT dispersion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood pressure</td>
<td>Hypotension</td>
<td>Marked orthostatic hypotension with increase in pulse 20 bpm or decreased blood pressure of 20 mmHG upon standing</td>
<td>Nutrition, blankets, warming jacket Consult internal medicine, emergency or intensive care unit, rule out hypoglycemia or drug toxicity.</td>
</tr>
<tr>
<td>Hypothermia</td>
<td>Temperature less than 35.5°C and accompanied with other features</td>
<td>If lower than 35°C</td>
<td>Nutrition, blankets, warming jacket Consult internal medicine, emergency or intensive care unit, rule out hypoglycemia or drug toxicity.</td>
</tr>
<tr>
<td>Dehydration</td>
<td>Hypotension and bradycardia related to malnutrition usually note acute dehydration; elevated blood urea nitrogen (BUN) and creatinine</td>
<td>Significant dehydration and malnutrition BUN/creatinine ration greater than 20 to 1</td>
<td>Fluid replacement with sodium solutions, for sever cases use intravenous intervention, check electrolytes and renal function</td>
</tr>
<tr>
<td>Metabolic</td>
<td>Elevated serum bicarbonate due to vomiting or diuretic abuse or low bicarbonate level due to laxative abuse</td>
<td>Severe greater than 33-35 mEq/l</td>
<td>Intravenous infusions of sodium chloride at slow rate; milder cases with oral hydration; prevent vomiting</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Assess</th>
<th>What to look for</th>
<th>High Risk</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypokalemia</td>
<td>Low serum potassium level less than 3.0 mmol/l</td>
<td>Potassium level less than 2.7 mEq/l</td>
<td>Intravenous supplementation if less than 2.7 at rate of 10 mEq/l per hour *** and continuous cardiac monitoring ECG</td>
</tr>
<tr>
<td></td>
<td><strong>Normal electrolytes level does not exclude medial compromise.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypernatremia or</td>
<td>Consider water loading</td>
<td>Less than 130 mmol/l admit, consider ICU if less than 120-125 mmol/l</td>
<td>Must be corrected slowly</td>
</tr>
<tr>
<td>Hyponatremia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other electrolyte</td>
<td>Check PO4, Magnesium, Calcium, ECG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>abnormalities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypoglycemia</td>
<td></td>
<td>Rare finding</td>
<td>Oral or NG correction (sugar drink, hypostop). IV dextrose bolus if severe (altered conscious or mental state, seizures): 5 mLs/kg of 10% dextrose. Consider ongoing IV dextrose if no oral input or input unlikely in presence of initial hypoglycemia. Be aware of rebound hypoglycemia after IV dextrose bolus. Glucagon in malnourished patients may not be effective as glycogen storages are likely to be low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Admit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brief hypoglycemia occurs with re-feeding after meals but should normalize</td>
<td></td>
</tr>
</tbody>
</table>

* Sources: Junior MARSIPAN, 2011; Mehler & Anderson, 2010, ** Bazett’s formula: QTC = √ (AT/RR), *** Reasonable range for oral potassium repletion is 20 to 40 mEq of potassium chloride preparation 2 x daily with daily monitoring of blood levels.

APPENDIX B:

**KEY PHYSICAL ASSESSMENT PARAMETERS AND ACTION POINTS FOR YOUNGER PATIENTS**

Younger patients may present with subtle findings, nondescript symptoms and are also likely to resist treatment. As with adults, risk indicators for hospitalizing children and adolescents serve as approximate, rather than absolute values and decisions to admit are based on the clinical judgment of the paediatrician in consultation with care providers. In determining the level of medical risk in young patients the following additional points are important:

- Malnutrition in young patients cannot be determined by BMI alone
- The definition of serious underweight in adults does not apply to children and adolescents
- Younger patients with rapid weight loss are at serious medical risk
- Danger thresholds for children and adolescents vary with age and growth development
- Normal and cut off physiological parameters such as blood pressure vary with age
- Younger patients at medical risk may present without amenorrhea or significantly low BMI

### Key Physical Assessment Parameters and Action Points for Younger Patients

<table>
<thead>
<tr>
<th>Check for/measure</th>
<th>What to look for</th>
<th>High Risk</th>
<th>Specific management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart rate</td>
<td>Bradycardia</td>
<td>HR less than 50bpm</td>
<td>Nutrition</td>
</tr>
<tr>
<td></td>
<td>Postural tachycardia</td>
<td>Or symptomatic postural tachycardia</td>
<td>ECG</td>
</tr>
<tr>
<td>ECG (especially if bradycardic or any other CVS complication)</td>
<td>Other cause for bradycardia (heart block)</td>
<td>Prolonged QTc</td>
<td>Nutrition and correct electrolyte abnormalities QTc greater than 450 msec: bed rest, discuss with cardiologist. Medication likely to be unhelpful unless symptomatic or tachycardic, should correct with nutrition and correct electrolytes.</td>
</tr>
<tr>
<td></td>
<td>Arrhythmia</td>
<td>HR less than 50 bpm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Check QTc time (using Bazzett’s formula)</td>
<td>Arrhythmia associated with malnutrition and or electrolyte disturbances</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Check electrolytes, rule out genetic etiology or drug effects (e.g. prescribed medications and illicit drug use)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood pressure</td>
<td>Hypotension – refer to standardized charts for age and sex</td>
<td>Systolic, diastolic or meant arterial pressure below the 0.4th centile for age and sex and/or postural drop of more than 15 mmHg.</td>
<td>Nutrition, bed rest until postural hypotension improved, echo likely to be abnormal while malnourished</td>
</tr>
<tr>
<td>Hypothermia</td>
<td>Temperature less than 36°C</td>
<td></td>
<td>Nutrition</td>
</tr>
<tr>
<td></td>
<td>Will usually be accompanied by other features</td>
<td></td>
<td>Blankets</td>
</tr>
<tr>
<td></td>
<td>Beware less than 35°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dehydration</td>
<td>Hypotension and bradycardia related to malnutrition usually not acute dehydration</td>
<td>Significant dehydration and malnutrition</td>
<td>ORS orally or via NG preferred treatment unless hypovolemic, beware of giving fluid boluses unless hypovolemic (may have cardiac compromise or be hyponatraemic, check</td>
</tr>
</tbody>
</table>
## Key Physical Assessment Parameters and Action Points for Younger Patients

<table>
<thead>
<tr>
<th>Check for/measure</th>
<th>What to look for</th>
<th>High Risk</th>
<th>Specific management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypovolemia</strong></td>
<td>Tachycardia or inappropriate normal HR in undernourished young person, hypotension and prolonged capillary refill time</td>
<td>Hypokalemia as below, uncontrolled vomiting with risk of esophageal and other visceral tears</td>
<td>Senior pediatric review, normal saline 10ml/kg bolus then review; if IV fluids are used than those should usually be normal saline with added electrolytes (e.g., KCl, phosphate) as required. Consider other factors (intercurrent sepsis as a contributor)</td>
</tr>
<tr>
<td><strong>Other features of severe malnutrition</strong></td>
<td>Lanugo hair, Dry skin, Skin breakdown and/or pressure sores</td>
<td></td>
<td>Nutrition, if skin breakdown or pressure sores seek specialist wound care</td>
</tr>
<tr>
<td><strong>Evidence of purging</strong></td>
<td>Low potassium, Metabolic alkalosis or acidosis</td>
<td></td>
<td>Specialist nursing supervision to prevent vomiting</td>
</tr>
<tr>
<td><strong>Hypokalemia</strong></td>
<td>Likely due to purging. <strong>Normal electrolytes level does not exclude medical compromise</strong></td>
<td>Potassium less than 3 mmol/l admit' consider HDU, PICU, or ICU if less than 2-2.5 mmol/l</td>
<td>Correction IV initially if less than 3 mmol/l Oral supplements may still be vomited ECG</td>
</tr>
<tr>
<td><strong>Hyponatraemia or Hypernatremia</strong></td>
<td>Less common but important, Consider water loading</td>
<td>Sodium less than 130 mmol/l admit</td>
<td>If IV correction proceed with care</td>
</tr>
<tr>
<td><strong>Other electrolyte abnormalities</strong></td>
<td>Check PO4, Magnesium, Calcium, ECG, any significant abnormalities</td>
<td>Sodium greater than 145 mmol/l, commonly called dehydration Consider HDU, PICU or ICU if less than 120-125 mmol/l</td>
<td>Admit, nutrition correction abnormalities, proceed with care</td>
</tr>
<tr>
<td><strong>Hypoglycemia</strong></td>
<td>Hypoglycemia is a relatively rare finding at presentation and implies poor compensation or co-existing illness (e.g., infection)</td>
<td></td>
<td>Oral or NG correction, where possible, (sugar drink, hypostop). IV bolus if severe (altered conscious or mental state; seizures): 5 mls/kg of 10% dextrose.</td>
</tr>
<tr>
<td>Check for/measure</td>
<td>What to look for</td>
<td>High Risk</td>
<td>Specific management</td>
</tr>
<tr>
<td>---------------------------</td>
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<tr>
<td></td>
<td></td>
<td>Admit</td>
<td>Consider ongoing IV dextrose if no oral input or input unlikely in the presence of initial hypoglycemia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Beware of rebound hypoglycemia after IV dextrose bolus.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Glucagon in malnourished patients may not be effective as glycogen storages are likely to be low.</td>
</tr>
<tr>
<td>Mental Health Risk or safeguarding family</td>
<td>Suicidality</td>
<td>Admit for comprehensive psychosocial assessment, admit for place of safety if necessary</td>
<td>Admit to psychiatric unit, apply safeguarding procedures, consult tertiary eating disorder program.</td>
</tr>
<tr>
<td></td>
<td>Evidence of self-harm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family not coping</td>
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</tr>
</tbody>
</table>

British Columbia Ministry of Health Services (2012). *Clinical Practice guidelines for the BC Eating Disorders Continuum of Services.*
APPENDIX C:

RE-FEEDING GUIDELINES BASED ON SEVERITY INDICATORS

At risk patients include:

- Poor fluid intake prior to admission;
- Caloric intake less than 500 calories per day prior to admission;
- SUSS test positive – stand from squat or sit up from lying with difficulty i.e. needing to use upper limbs for support;
- History of rapid weight loss.

Potential complications with Re-Feeding:

- Edema;
- Sudden sustained increase in pulse greater than 80-90 bpm;
- Abdominal bloating, constipation, abdominal pain;
- Electrolyte derangements: Hypoglycemia, Hypophosphatemia, Low magnesium, Hypokalemia or Hyponatraemia.
- Re-feeding Syndrome - When patients are first reintroduced to food, the sudden reversal of prolonged starvation poses a number of potential dangers, which is referred to as re-feeding syndrome. Reintroduction of nutrients leads to rapid reductions in electrolytes such as potassium and phosphate and the resulting cardiac effects can be fatal. The key electrolyte for re-feeding syndrome is phosphorus (Mehler & Andersen, 2010). Re-feeding syndrome can be avoided in severely malnourished patients by gradually increasing nutritional intake and frequently monitoring blood chemistry values (potassium, phosphorus, magnesium, sodium and glucose). Restricting carbohydrate calories and increasing dietary phosphate (e.g. milk) also reduces the threat of re-feeding syndrome. For patients who are prescribed oral or enteral nutritional supplements, high-calorie supplements with lower levels of carbohydrates are recommended (MARSIPAN, 2010). For all sources of fluid it is recommended that total intake not exceed 30–35 mL/kg/24h (Mehler & Andersen, 2010).

Guidelines:

- Input and output of fluids supervised and measured.
- Daily electrolyte and phosphorus checks
- In the absence of severity indicators:
  - A starting caloric intake of 20-25 kcal/kg/day appears to be safe
  - Monitor electrolytes, serum phosphorus and clinical status for the first 7 to 10 days
  - Monitor for development of tachycardia or edema
  - Intake should rarely exceed 70-80 kcal/kg/day
  - Limit protein intake to 10-1.5 g/kg/day
  - Start with no-added-salt diet and low-fat
  - Aim for 2-3 pound (0.9-1.4kg) weight increase per week
- In the presence of severity indicators:
  - A starting caloric intake of 5-10 kcal/kg/day reviewed within 12 hours
  - Decisions to initiate low-calorie-re-feeding should occur in consultation with an expert physician in clinical nutrition and a clinical nutrition team
- Increase caloric intake in steps 15-20 kcal/kg/day within 2 days unless contraindicated
- Increased feeding should not be delayed by minor or moderate abnormalities in liver functioning (e.g. alanine transaminase up to four times the upper limit of normal range)

MARSIPAN, 2010; Mehler & Andersen, 2010)


APPENDIX D:

PEDIATRIC RE-FEEDING GUIDELINES

General principles of managing re-feeding

- In general, recommended starting at Meal plan C (1700cal) and starting Phosphate 500mg PO BID.

- Increase intake by 200-300cal every day i.e. increase meal plan daily for example from A to B. On morning rounds, please consider ordering meal plan increases for the following day. Meal plans can be increased on Fridays for Saturday morning; however, typically, meal plans should remain constant from Saturday to Sunday.

- After rehydration, ensure that as the IV is weaned off, the oral fluid intake increases correspondingly. It would be best to use oral/NG Pedialyte to rehydrate and remove the IV as soon as possible.

- Total maintenance fluids should be around 1500-2000 mL per day, e.g. 200 mL Pedialyte with each meal and snack (x6 per day, total of 1200 mL) and the rest will be fulfilled within the meal plan.

- If solid food as per meal plans A-G is refused, substitute with Ensure Pus. Please see Food Refusal Guidelines later in this document for further details.

- For patients at high risk of refeeding syndrome or with known refeeding syndrome, close monitoring (telemetry and daily to twice daily labs) must be performed during the risk period of refeeding, which is the first five to ten days of refeeding.

APPENDIX E:

NASOGASTRIC RE-FEEDING CONSIDERATIONS

- Patients’ needs determine if fees are intermittent, bolus or continuous
  - Continuous fees must be closely monitored in same way as intravenous infusion (e.g. hourly observations)
- Supplemental drinks or bolus nasogastric feeds must be observed and monitored closely, even when given by pump
- Day time bolus feeds at mealtimes are recommended to mimic physiological demand
- Choice can be offered on whether patient prefers oral or tube feed for each meal
- Night time feeds are less helpful with AN, as patient needs to stay awake and there is risk of aspiration of feed if tube is dislodged
- Insertion of nasogastric tube against a patient’s will requires legal considerations and may require the aid of mental health nurses trained in safe control and restraint techniques.

(Junior MARSIPAN, 2011; MARISPAN, 2010)


APPENDIX F:

ACUTE CARE: EATING DISORDER RESOURCE LIST

- Please see the following resources to support the ongoing acute care of patients/care providers/significant others who are admitted with an Eating Disorder. Professional discretion may be required when selecting therapeutic resources and should be tailored for each patient’s specific needs.

- Center for Clinical Interventions Resources
- Challenging Anxious Thoughts Worksheet
- Challenging Negative Thoughts Worksheet
- Kelty Resources for Eating Disorder and Body Image
- Kelty - Parents Survive to Thrive Guide
- How I Feel Worksheet
- Eating Disorder Information for Carers
- Life Story Worksheet
- Progressive Muscle Relaxation Script
- Relaxation Techniques Worksheet
- Self Esteem Journal
- Self Exploration Worksheet
- The Human Brain Diagram
- CBT Model Worksheet
- Therapy Goals Worksheet
- Why I'm Grateful Worksheet