Care Process Model



MANAGEMENT OF

Eating Disorders

This care process model (CPM) and accompanying patient education were developed by a multidisciplinary team including primary care physicians (PCPs), mental health specialists, registered dietitians, and eating disorder specialists, under the leadership of Intermountain Healthcare's Behavioral Health Clinical Program. Based on national guidelines and emerging evidence and shaped by local expert opinion, this CPM provides practical strategies for early recognition, diagnosis, and effective treatment of anorexia nervosa, bulimia nervosa, binge-eating disorder, and other eating disorders.

Why Focus ON EATING DISORDERS?

- Eating disorders are more common than assumed, especially in young women — and often underdiagnosed. In the U.S., 20 million women and 10 million men suffer from a clinically significant eating disorder during their lives, and many cases are unlikely to be reported.^{NEDA} Median age of onset for eating disorders is 18 to 21.^{AFP2} Diagnosis can be challenging due to the denial and secretive behaviors associated with eating disorders.
- Eating disorders can lead to significant morbidity and mortality. Risk of premature death is 6 to 12 times higher in women with anorexia nervosa.^{AED}
- Early diagnosis and treatment can prevent hospitalizations, morbidity, and mortality. Early diagnosis with intervention is correlated with improved outcomes.^{AFP1}
- Better communication and collaboration between PCPs, eating disorder specialists, dietitians, therapists, and hospitalists can improve care. In treating patients with eating disorders, no single approach is adequate because the problem itself is multidimensional.^{JOY}
- There are no easy fixes treatment takes time. The outcomes associated with anorexia nervosa are poor between 35% to 85% recover, and recovery takes from nearly 5 years to more than 6 years.^{SIM} For some patients, education, support, and empowerment is enough to change behavior. For others, eating disorders can develop into chronic illnesses. Every patient is different, and individualized care is critical to improve outcomes.

USING THIS DOCUMENT

See below for tips on using this document, based on your clinical role:

- **Primary care providers:** Review the entire document to learn about the primary care provider's role in the continuum of care.
- **Registered dietitians, MHI care managers, or mental health specialists:** Read pages 2 to 5 for an overview and pages 9 to 15 for information on teambased care and general treatment guidelines. Page 11 focuses on the dietitian's role and page 12 focuses on the therapist's role.
- Emergency department physicians and hospitalists: Pages 2 to 5 provide an overview and pages 16 to 18 focus on emergency and inpatient treatment.

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GOALS

- Provide guidelines to help PCPs identify and diagnose patients at risk or in the early stages of eating disorders so they can intervene early in the course of the disease
- Encourage use of evidence-based tools and conversation guides for screening and diagnosis
- Establish multidisciplinary teams to provide medical, dietary, and mental health treatment
- Provide effective, patient-focused care for eating disorders in emergency departments and hospitals
- Improve communication and coordination across the continuum of care for patients with eating disorders



KEY PRINCIPLES

- Effective early identification depends on awareness of a range of presenting symptoms and/or risk factors, beyond merely weight or weight loss.
- Brief screening tools, accompanied by specific interview techniques, can assist in diagnosis.
- Factors that predict poor outcomes include psychiatric comorbidities, poor social support, duration of illness, and hospitalization.
- Stepped care, based on the severity of the condition and other factors, is recommended.

TABLE 1: Comparison of anorexia and bulimia^{AFP1}

Anorexia nervosa	Bulimia nervosa
History, common sym	iptoms
Amenorrhea, constipation, headaches, fainting, dizziness, fatigue, cold intolerance	Bloating, fullness, lethargy, GERD, abdominal pain, alternating diarrhea and constipation, sore throat (from vomiting)
Physical findings	
Cachexia, acrocyanosis, dry skin, hair loss, bradycardia, orthostatic hypotension, hypothermia, loss of muscle mass and subcutaneous fat, lanugo	Knuckle calluses, dental enamel erosion, parotid and other glandular enlargement
Labs	
Hypoglycemia, leukopenia, elevated liver enzymes, euthyroid sick syndrome (low TSH level but normal T3, T4 levels)	Hypochloremia, hypokalemia, or metabolic acidosis (from vomiting, laxatives, or diuretics); elevated salivary amylase
ECG findings	
Low voltage, prolonge bradycardia	d QT interval,

► OVERVIEW

Early diagnosis of eating disorders can be challenging. However, because of the risk for rapid progression, chronicity, and mortality, early identification is vital. This section provides practical tips for identifying eating disorders early. It also identifies comorbidities, treatment approaches, and diagnostic criteria.

Early identification

Early identification requires watching for signs or symptoms that may not be specified in diagnostic criteria. Do not rely primarily on weight. People at normal weight can have eating disorders, and a variety of presenting symptoms and/or risk factors may indicate the need for screening (*see page 5*). Tools for screening and diagnosis include:

- The **Eating Disorders in Primary Care (ESP) Questionnaire**, which has been proven to be reliable as an eating disorder screening tool and is brief enough to use in a standard primary care visit.^{ESP} Ask the ESP questions when you suspect an eating disorder and during pre-adolescent and adolescent well checks (see page 5).
- **Patient conversation techniques** that support an effective discussion about eating disorders with the patient or family, especially in the early stages (see page 7).

Mental Health Integration (MHI) team members can also help assess eating disorders at the early stages, identify comorbidities, and suggest intervention.

Common comorbidities and prognostic indicators

Common comorbidities include substance use disorders, depression, anxiety, and personality disorders.^{APA} If a patient screens positive for an eating disorder, consider a full evaluation using the *Mental Health Integration (MHI)* <u>*Child/Adolescent Baseline Packet*</u> or <u>*Adult Baseline Packet*</u> (see page 20).

Factors that predict poor outcomes include psychiatric comorbidities, a chaotic family structure, inadequate family or social support, duration of illness, male gender, and a history of hospitalizations. For some patients, eating disorders become chronic; treatment then shifts from resolving the condition to building management skills and strategies to avoid serious complications.

TREATMENT APPROACH AND GOALS

- For children and adolescents, family involvement in treatment is vital; for adults, involving partners can be helpful. It is important to assess family stressors without implying blame or prompting family members to blame each other.^{APA}
- A stepped-care approach fosters effective treatment. This CPM defines 5 treatment levels, based on treatment stages defined in major guidelines^{APA} but modified to conform to local resources and expertise:
 - Primary care management with MHI support if applicable (see pages 4-8, 15, 19)
 - Multidisciplinary team treatment with a physician, therapist, dietitian, and others (see pages 4–5, 9–16, 19)
 - Emergency department (ED)/inpatient treatment, with mental health or medical admit as needed (*see pages 4–5, 16–18*)
 - Residential treatment, based on illness severity and ability to function
 - Intensive outpatient treatment, as a transition out of residential treatment
- **Treatment goals:** restore patients to a healthy weight (anorexia); reduce or eliminate binging and purging (bulimia); treat comorbidities and physical complications; enhance the patient's motivation to participate in treatment; educate the patient on healthy eating patterns; help patients change core dysfunctional thoughts, attitudes, and behaviors related to the eating disorder; enlist family support and provide family treatment; and prevent relapse.

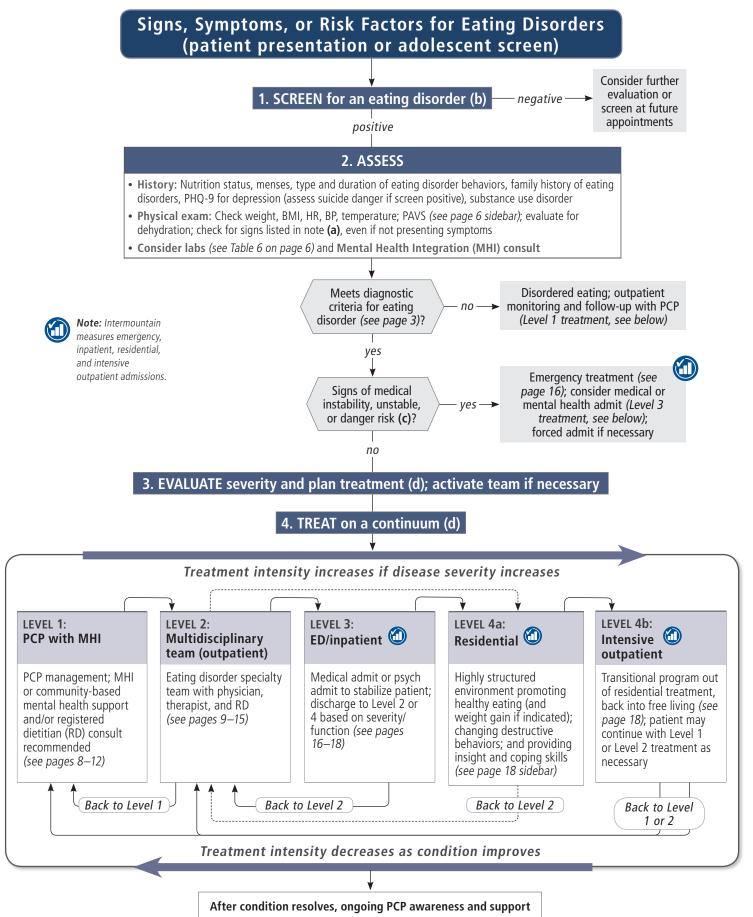
The algorithm and notes on pages 4 and 5 guide the choice of treatment level.

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TABLE 2: Anorexia nervosa (307.1/F50.01 and F50	.02 by type) ^{DSM}		
Diagnostic criteria	Types		Current severity
 A. Restriction of energy intake relative to requirements, leading to a significantly low body weight in context of age, sex, developmental trajectory, and physical health. <i>Significantly low weight</i> is defined as a weight that is less than minimally normal or, for children and adolescents, less than minimally expected. B. Intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain, even though at a significantly low weight. C. Disturbance in the way one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight. 	 Restricting type (F50.01): I 3 months, the individual has n recurrent episodes of binge ea behavior (i.e., self-induced von misuse of laxatives, diuretics, o This subtype describes present weight loss is accomplished pr dieting, fasting, and/or excessi Binge eating/purging type During the last 3 months, the i has engaged in recurrent episo eating or purging behavior. 	ot engaged in ting or purging hiting or the or enemas). ations in which marily through ve exercise. (F50.02): ndividual	For adults: • Mild: BMI ≥ 17 kg/m ² • Moderate: BMI 16–16.99 kg/m ² • Severe: BMI 15–15.99 kg/m ² • Extreme: BMI < 15 kg/m ² For children and adolescents, corresponding BMI percentiles should be used. Note: The level of severity may be increased to reflect clinical symptoms, degree of functional disability, and need for supervision.
TABLE 3: Bulimia nervosa (307.51/F50.2) ^{DSM}			
Diagnostic criteria		Current se	everity
 A. Recurrent episodes of binge eating. An episode of binge eating is of 1. Eating, in a discrete period of time (e.g., within any 2-hour period definitely larger than what most individuals would eat in a simil circumstances. 2. A sense of lack of control over eating during the episode (e.g., a or control what or how much one is eating). B. Recurrent inappropriate compensatory behaviors in order to prever vomiting; misuse of laxatives, diuretics, or other medications; fastint C. The binge eating and inappropriate compensatory behaviors both of week for 3 months. D. Self-evaluation that is unduly influenced by body shape and weight E. The disturbance does not occur exclusively during episodes of anorthy is a set of the set of	bd), an amount of food that is ar period of time under similar a feeling that one cannot stop eatin at weight gain, such as self-induced ng; or excessive exercise. boccur, on average, at least once a	 Mild: , competing Model inapproving Severe inapproving Extreminapproving Note: The 	 ts: An average of 1–3 episodes of inappropriate nsatory behaviors per week. rate: An average of 4–7 episodes of opriate compensatory behaviors per week. e: An average of 8–13 episodes of opriate compensatory behaviors per week. me: An average of 14 or more episodes of opriate compensatory behaviors per week. e level of severity may be increased to her symptoms and the degree of functional
TABLE 4: Binge-eating disorder (307.51/F50.8)			
 Diagnostic criteria A. Recurrent episodes of binge eating (see Criterion A, Table 3 above) B. The binge-eating episodes are associated with 3 (or more) of the for 1. Eating much more rapidly than normal. 2. Eating until uncomfortably full. 3. Eating large amounts of food when not feeling physically hungr 4. Eating alone because of feeling embarrassed by how much one 5. Feeling disgusted with oneself, depressed, or very guilty afterw. C. Marked distress regarding binge eating is present. D. The binge eating occurs, on average, at least once a week for 3 more. E. The binge eating is not associated with the recurrent use of inapproximation. 	ollowing: y. is eating. ard. onths. opriate compensatory behavior as i	Mode Sever Extree week Note: The reflect oth disability.	•
bulimia nervosa and does not occur exclusively during the course o	f bulimia nervosa or anorexia nervo	sa.	
TABLE 5: Other eating disorders ^{DSM} Other specified feeding or eating disorder (307.59/F50.8)		Unepositive for	eding or eating disorders (307.50/F50.9)
 Examples of presentations that can be specified using the "other specified using the "other specified using: Atypical anorexia nervosa: All of the criteria for anorexia nervos significant weight loss, the individual's weight is within or above the Bulimia nervosa (of low frequency and/or limited duration nervosa are met, except that the binge eating and inappropriate coaverage, less than once a week and/or for less than 3 months. Avoidant/Restrictive Food Intake Disorder: An eating or feel lack of interest in eating or food; avoidance based on the sensory or about aversive consequences of eating) as manifested by persister nutritional and/or energy needs. (See DSM-5 criteria for full criteria Binge-eating disorder (of low frequency and/or limited duration binge-eating disorder are met, except that the binge eating occurs, week and/or for less than 3 months. Purging disorder: Recurrent purging to influence weight or shap misuse of laxatives, diuretics, or other medications) in the absence 	basa are met, except that despite the normal range. a): All of the criteria for bulimia tompensatory behaviors occur, on ding disturbance (e.g., apparent characteristics of food, concern at failure to meet appropriate .) tration): All of the criteria for , on average, less than once a e (e.g., self-induced vomiting;	This category a characteristic o clinically signific occupational, o predominate bu disorders in the class. The unsp is used in situat specify the reas feeding and eat in which there i	pplies to presentations in which symptoms f a feeding and eating disorder that cause cant distress or impairment in social, in other important areas of functioning ut do not meet the full criteria for any of the effeding and eating disorders diagnostic ecified feeding and eating disorder category tions in which the clinician chooses <i>not</i> to son that the criteria are not met for a specific ting disorders, and includes presentations is insufficient information to make a more sis (e.g., in emergency room settings).

ALGORITHM



ALGORITHM NOTES

(a) Presenting signs/symptoms or risk factors AFP1, AAP

Signs/symptoms

- **General:** Marked or sudden weight loss, gain, or fluctuation; failure to gain expected weight in child/adolescent who is still growing and developing; cold intolerance; weakness, fatigue, or lethargy; dizziness; syncope; hot flashes/sweating episodes; multiple food allergies
- **Oral/dental and throat:** Oral trauma/lacerations; dental erosion or caries; perimolysis; parotid enlargement; recurrent sore throats
- **GI:** Epigastric discomfort; early satiety and delayed gastric emptying; acid reflux; vomiting blood; hemorrhoids and rectal prolapse; constipation; diarrhea; abdominal pain
- Endocrine: Irregular or missed menses; loss of libido; low bone density; stress fractures; infertility
- **Neuropsychiatric:** Seizures; memory loss/poor concentration; insomnia; depression/anxiety/ obsessive behavior; self-harm; suicidal ideation/attempt
- Cardiorespiratory: Chest pain; palpitations; bradycardia; arrhythmias; shortness of breath; edema
- **Dermatologic:** Lanugo hair; hair loss; yellowish skin discoloration; calluses or scars on the dorsum of the hand (Russell's sign); poor healing
- **Electrolytes:** Hypokalemia; hypochloremia; elevated CO₂ (High normal CO₂ with low normal chloride and/or urine pH 8.0 to 8.5 can indicate recurrent vomiting.)

(b) Screening tool for eating disorders

The *Modified ESP (Eating Disorders Screen in Primary Care)* is effective in identifying patients who require further evaluation for eating disorders.^{ESP}

Modified ESP questions:

- 1. Are you concerned with your eating patterns?
- 2. Do you ever eat in secret?
- 3. Does your weight affect the way you feel about yourself?
- 4. Have any members of your family suffered from an eating disorder?

Scoring:

- + 0 1 "Yes" responses: Eating disorder ruled out
- ≥2 "Yes" responses: Eating disorder suspected, evaluate further

Risk factors

- Age: 12 to 18 years
- Family history of an eating disorder
- Excessive exercise or involvement in extreme physical training or athletics (see page 8 sidebar)
- Type 1 diabetes and unexplained weight loss and/ or poor metabolic control or diabetic ketoacidosis
- Weight-related behaviors:
 - **Diet and/or weight loss behaviors** when weight is in normal range
 - Compensatory behavior(s) after eating, perceived overeating, or binge eating (self-induced vomiting, fasting, excessive exercise)
 - Use/abuse of appetite suppressants, caffeine, diuretics, enemas, laxatives, excessive hot or cold fluids, artificial sweeteners, sugar-free gum
- Vegetarianism (in young women)

(c) Signs of medical instability or danger risk Adults: HR <50 bpm; BP <90/50 mm Hg; glucose <60 mg/dL; electrolyte abnormalities

- Adults: HR <50 bpm; BP <90/50 mm Hg; glucose <60 mg/dL; electrolyte abnormalities (potassium <2.5 mEq/L; sodium <125 mEq/L); temperature <97.0° F (36.1° C); dehydration; hepatic, renal, or cardiovascular compromise; poorly controlled diabetes
- **Children and adolescents:** HR near 40 bpm; orthostatic BP changes; BP <80/50 mm Hg; hypokalemia; hypophosphatemia; hypomagnesemia
- Suicide risk: Specific plan with lethality or intent; depression with poor impulse control and/or social support; previous suicide attempt (see <u>Intermountain's</u> <u>Depression CPM</u> for suicide risk assessment details)
- Psychosocial stressors: Family/relationship dysfunction, sexual trauma
- Risk to self or others: Self-harm behaviors toward self or others
- **Inability to function:** Significant thought disturbances with regard to food and eating; body dysmorphic disorder (*see sidebar page 10*); downward trajectory in disease course

(d) Factors t	nat determine treat	ment level ^{AFP1,AFP2}		·	
Factor	Level 1: PCP with MHI	Level 2: Multidisciplinary team	Level 3: ED/inpatient	Level 4a: Residential	Level 4b: Intensive outpatient
Medical status	Sta	able	Unstable; see note (c)	Sta	able
Psych status	No psych comorbidities or suicide risk	One or more comorbid psych diagnoses	Risk of danger to self or others; see note (c)	One or more comor	bid psych diagnoses
Diagnosis	Screen positive, but does not meet diagnostic criteria	Patient meets diagnostic	criteria for anorexia nervosa, disorder;	bulimia nervosa, binge-eatin see page 2	g disorder, or other eating
Weight, BMI*	BMI within acceptable	Persistent weight loss;	Weight <75% ideal	75% to 80% IBW	85% to 90% IBW
	limits for age	BMI <18	body weight (IBW); rapid weight loss over 30 days prior to admission (see admission criteria p. 17)	Unable to achieve prescrib binge/purge cycle; u	ed weight; unable to break ncontrolled symptoms
Function	Function not impaired	Daily function somewhat impaired	N/A	Cannot function in environment	Function improved, but needs help for transition
Support	Good social support	Good social support	N/A	Poor social support	Poor social support
		Treatment level transition	s as condition worsens or	resolves	
Transition options	 Level 2 if decreased BMI or function Level 3 if medical or psychiatric instability 	 Level 3 if medical or psychiatric instability Level 4a if cannot function in environment 	Level 2 or 4a,based on recommendation of Level 2 care team	Level 2 or 4b, based on recommendation of Level 2 care team	Level 1 or 2, based on recommendation of Level 2 care team

*BMI alone is not an indication for residential or intensive outpatient care and should be evaluated in the context of other physical and psychological factors.

KEY PRINCIPLES

- Patients with a suspected eating disorder may be more or less willing to reveal information based on your language and tone.
- Any time you feel uncomfortable working with the patient, bring in a mental health professional or another expert for support.
- After diagnosis, a multidisciplinary team provides the best outcomes.
- If you rule out an eating disorder but still suspect the patient is at risk, provide patient/family education and follow up with the patient regularly.

PATIENT EDUCATION

Education is a critical element of the diagnosis process. Use Intermountain resources (which also provide links to other materials) to educate patients and their families:

	IN FAMILIES Internetion	PACE SHEET FOR PATIENTS A	ID FAMILIES INSTRUM
Eating Disorders		Eating Disorders: Conversation Tips for Fri	ends and Family
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Eating Disorders

Eating Disorders: Conversation Tips for Friends and Family

PHYSICAL ACTIVITY VITAL SIGN (PAVS):

- 1. On average, how many days a week do you perform physical activity or exercise?
- 2. On average, how many total minutes of physical activity or exercise do you perform on those days?

Days/week X minutes/day = min/week (PAVS)

- 3. How would you describe the intensity of your activity?
 - Light = casual walk
 - Moderate = brisk walk
 - Vigorous = jogging

DIAGNOSIS IN PRIMARY CARE

Primary care providers serve an important role in evaluating disordered eating and diagnosing eating disorders. Of adults with eating disorders, at least half were diagnosed by PCPs.^{SIM} If at any time during the diagnosis process you feel uncomfortable or unprepared to work with the patient, rely on other experts to support you (MHI care manager, an on-site therapist or psychologist, etc.).

Process of diagnosing eating disorders

The process of diagnosing eating disorders is two-fold:

• A comprehensive medical evaluation, including a medical history, review of systems, physical examination, and laboratory and diagnostic testing^{JOY}

• A patient and family conversation to determine whether an eating disorder is present These two steps can happen in any appropriate order. For example, if you notice a low heart rate and weight loss in a standard physical, you might begin a conversation about eating and dieting patterns with the patient.

Comprehensive medical evaluation

Check the following during the physical exam (see Table (a) on page 5 for a list of presenting signs/symptoms):

- Vital signs Supine and standing heart rate, blood pressure, Physical Activity Vital Sign (PAVS) (*see sidebar*), oral temperature, etc.
- Medical history eating behavior, medications, weight, menstrual history, family history, psychological history.
- Review of symptoms restriction: light-headedness, syncope, weakness, palpitations, overuse injuries, decreased school/work/athletic performance; binging-purging: sore throats, bloating, abdominal pain, diarrhea, constipation, rectal prolapse, GI bleeding, overuse injuries, decreased school/work/athletic performance.
- **Physical exam restriction**: hypotension, bradycardia, hypothermia, cachectic, lanugo hair, dry skin, mucous membranes, hair loss, lower extremity edema; **binging-purging**: "puffy" appearance, glandular hypertrophy, dental caries, periodontal disease, characteristic odor, pharyngeal erythema, epigastric tenderness, Russell's sign (callouses on dorsum of proximal interphalangeal joints).
- Lab tests as indicated Use the tests in *Table 6* for diagnosis and follow up if initial results are abnormal (e.g., the patient has abnormal electrolytes at diagnosis).

Patient and family conversation

The *Modified Eating Disorder Screen in Primary Care* (ESP; *see Table (b) page 5*) can help you determine whether an eating disorder is present, but it may not be enough. A conversation is helpful in determining diagnosis and/or the need for team-based treatment.

- **Situation**: When appropriate, it may be helpful to talk to patients with their family member(s) first, then talk to the patient alone (depending on the patient's age). Ask general questions when the family is present and more sensitive questions when alone with the patient. For adolescent patients, ask questions in a developmentally appropriate, precise, non-judgmental way.^{AFP1} You may want to avoid leading questions with some (e.g., don't ask an early-stage patient if she uses laxatives).
- **Support:** If you feel uncomfortable or unprepared to have this conversation, rely on other experts for support (MHI care manager, on-site therapist/psychologist, etc.).
- **Questions:** The questions in *Table 7* provide ideas for engaging patients and their families in meaningful conversations that help you identify eating disorders. Patients and family may not always reveal critical information in this conversation (and the patient may not perceive a problem), but approaching questions in a sensitive way can make the conversation more effective.

TABLE 6: Labs for eating disorder evaluation	
Lab/test	When to use
Basic blood chemistry: serum electrolytes; renal function (BUN, Cr); calcium; liver function tests; TSH; CBC and differential; urinalysis	All patients with suspected eating disorders
Additional blood chemistry: iron studies; vitamin D; vitamin B12; magnesium; phosphorous	Malnourished and severely symptomatic patients
Additional blood chemistry: serum luteinizing hormone; follicle- stimulating hormone; prolactin; estradiol; consider urine pregnancy test	Patients with delayed menarche — no menses by age 15; absence/delay of secondary sexual characteristics by age 13; secondary amenorrhea (no menses for 3 consecutive months)
Toxicology screen	Patients with suspected substance use
Serum amylase	Patients with suspected surreptitious vomiting
Stool for guaiac	Patients with suspected gastrointestinal bleeding
Radiologic imaging: DXA, radiographs, advanced imaging	DXA for patients with amenorrhea for 6 months or more of prolonged oligomenorrhea (<6 periods in 24 months); radiographs to evaluate for stress fractures

Торіс	Questions	
Questions to start the conversation	 How have you been feeling in general? How do you feel about yourself?	• Do you mind if we talk about your eating habits?
Initial critical questions	 Are there foods or food groups that you avoid eating? How do you feel about dieting in general? How do you feel about your body size? 	 In what ways does your weight affect the way you think about yourself? What percentage of your waking hours do you spend thinking about weight, food, and body image?
Diet and dieting	 Do you worry that you have lost control of how much you eat? Are you happy with your eating behavior? Do you eat in secret? What did you have for breakfast today/yesterday? Lunch? Dinner? Snacks? 	 Do you count your calories? Watch fat grams? Avoid certain foods? Do you ever eat a lot in one sitting — enough that you feel sick afterward? Are you worried because sometimes you can't stop eating?
Vomiting/purging	 Do you make yourself sick because you feel uncomfortably full? 	• Do you use diuretics, laxatives, or diet pills?
Weight and self-perception	 When you look in the mirror, what do you see? What do you think you should weigh? What are you doing to reach or maintain that weight? 	 Have you recently lost or gained a lot of weight in a short period of time? What was your lowest weight in the last 2 years? Your highest weight?
Exercise	• How much do you exercise? How often? How intensely?	• Do you feel anxious if you miss a workout?
Family and support	• Does your family have any history of obesity, eating disorders, depression, mental illness, or substance abuse (parents or other family members)?	 Who are your primary sources of emotional support? How do they support you? Has your family shown any concerns about your eating?
Health	 Female patients: When did you have your first period? Are your periods regular? When was your last period? Do you have constipation? Diarrhea? Are you ever dizzy? Weak? Tired? Have you ever fainted? Do you bruise easily? Bleed easily? 	 Do you get cold easily? Have you lost any hair? Grown new hair? Do you have dry skin? Do you ever feel bloated? Have abdominal pain? Burning? Do you ever have muscle cramps? Joint pains? Chest pain?

LEAD, REFER, OR SEEK CONSULTATION? FACTORS TO CONSIDER

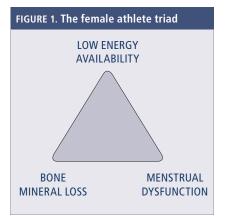
You may lead a multidisciplinary team yourself, refer the patient to another physician, or consult with another physician about the patient. Consider these factors when making this decision:

- Your level of comfort with the patient/case
- Level of complexity of the case
- Comorbid conditions and personality disorders
- The patient's family support and family structure
- History of hospitalizations

Throughout the treatment process, continually re-evaluate the team and bring in other team members as needed.

THE FEMALE ATHLETE TRIAD

Three clinical conditions are often associated with female athletes with eating disorders — the female athlete triad, below. These conditions pose significant health risks and potentially irreversible consequences.



Diagnosis: eating disorder

After diagnosing an eating disorder, do one of the following according to the severity of the case (see *algorithm and notes*, *pages 4 and 5*):

- If the patient is **medically unstable or there is a suicide risk**, send the patient to the ED or other care facility.
- If the patient is **not medically unstable or at risk for suicide**, assemble a multidisciplinary team and educate the patient. A multidisciplinary team approach is the standard of care for patients with established eating disorders. This team provides medical treatment, psychotherapy, and nutrition support in a coordinated approach (*see pages 9 to 13 for details*). You can assemble a team that you will lead, refer the patient to a multidisciplinary team, or consult with another physician.
 - If you have an MHI Care Manager at your location, reach out to him or her first.
 - If a dietitian is not available at your facility, contact your local hospital and ask for a dietitian with experience working with patients with eating disorders.
 - Reach out to your professional contacts.
 - If a team is not available in your area, see *Team communication on page 13* for virtual team ideas.
 - Educate the patient about the importance of the multidisciplinary team.

Intermountain has a goal to identify multidisciplinary care teams within each region. In addition, SelectHealth has identified a list of providers who treat eating disorders. Call 801-442-1989 to find resources near you.

Diagnosis: disordered eating

For patients who don't meet the criteria for an eating disorder, but show signs of disordered eating or are at risk for developing an eating disorder, provide information and close monitoring.

- Provide educational materials. See Patient and family resources on page 20 for ideas.
- Follow up. Depending on the severity of the risk, follow up in 4 to 8 weeks.
- **Reassess at each visit.** Perform the diagnosis steps outlined on *pages 6 and 7* during each visit to assess the patient's health and mental state.
- **Bring in a mental health professional.** If the patient seems at high risk or you don't have a high level of comfort, consult a mental health professional or other specialist.

DIAGNOSIS CHALLENGES AND INDICATORS

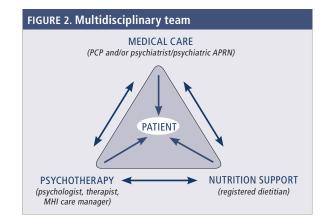
- Recognize the **challenges of diagnosing eating disorders.** For example, a patient may have recently lost significant weight (e.g., moving from obese to normal BMI). Although this is usually a healthy change, certain key indicators can be early signs of an eating disorder.
- Key indicators of eating disorders: dramatic weight change (more than 8 to 10 pounds per month), low weight combined with excessive exercise (more than 60 minutes per day most days of the week), and a significant imbalance between energy intake vs. expenditure.
- Continually **evaluate your comfort level** throughout the diagnosis and treatment process and reach out to other medical professionals as needed. A positive outcome for the patient should be the primary driver in the process.

MULTIDISCIPLINARY TEAM

A multidisciplinary team approach is widely recognized as the best practice to treating patients with eating disorders. This CPM advocates that **PCPs create multidisciplinary teams** to treat patients with eating disorders and establish methods of team communication.

Each provider in the multidisciplinary team plays a pivotal role in the patient's recovery. Core areas of focus for the team members include **medical care** (mental and physical health), **psychotherapy**, and **nutrition support**. While all team members should be experienced in eating disorder diagnosis and treatment, each team member has unique skills and responsibilities with respect to patient care. That said, there may be considerable overlap in what each member of the treatment team does to promote recovery from disordered eating.^{JOY}

It is important to note that this model is fluid and continuous; a multidisciplinary team works together throughout the course of care to achieve the best possible outcome.



Establishing roles

The multidisciplinary team's first step is to establish the role of each team member. These roles may vary, depending on the team available. For example, a PCP in a rural environment may not have immediate access to a dietitian, and so might work with a dietitian in another location to gather ideas and work with the patient directly.

KEY PRINCIPLES

- A multidisciplinary team should be brought together to promote the best outcome for eating disorder patients. Each team member brings special skills and different perspectives to the case.
- **Communication** among team members is critical.
- Although the cost of multidisciplinary care can be high (because of regular appointments with the team), inpatient or residential care is much more costly.

TEAM COORDINATION

The medical care team member serves as team coordinator and works closely with members of the multidisciplinary team:

- Assembles and coordinates the team, which may include a care manager in addition to the multidisciplinary team.
- Defines a method for exchanging information about each patient through team meetings, notes in the patient record, etc. (see page 13).
- Further works with the team to refine team roles as needed — roles often overlap in team-based care and may evolve in the course of a patient's treatment.

TABLE 8: Over	view of multidisci	plinary team member roles	
Role	Who fills the role?	What does this team member do?	How often does he/she meet with patient?
Medical care	 Primary care provider Psychiatrist Psychiatric APRN 	 Evaluates overall health of the patient (weight, nutrition, mental health, functional ability) Manages the medical consequences of the eating disorder Advises the patient on healthy levels of exercise Prescribes medication Recommends mental health and nutritional interventions 	1 to 4 times monthly, depending on severity
Nutrition support	• Registered dietitian	 Provides information on a healthy diet and meal planning Establishes healthy eating and exercise patterns Addresses behaviors related to food and eating Monitors physical symptoms Implements nutritional treatment plan 	1 to 4 times monthly, depending on severity
Psychotherapy	 Psychologist Therapist MHI care manager 	 Performs cognitive behavior, interpersonal, or family therapy Monitors mental health issues 	4 times monthly

OTHER MEDICAL PROFESSIONALS

As needed, other team members may treat the patient, for example:

- Gastroenterologists: digestive system consequences of disordered eating behaviors
- OB/GYNs: menstrual dysfunction (delayed menarche, oligomenorrhea, and amenorrhea), pregnancy
- **Sports medicine physicians:** evaluation and management of the female athlete triad (see sidebar p. 8)
- Orthopedic surgeons: bone health issues (e.g., stress fractures)
- Endocrinologists: growth and menstrual disturbance and concurrent conditions (e.g., thyroid disease)
- Adolescent medicine specialists: medical and emotional issues of teens
- Developmental and behavioral pediatricians: medical and emotional issues of children, adolescents, and their families
- **Plastic surgeons:** awareness of BDD (*see below*) if patients present for recurrent aesthetic interventions; referral to appropriate physicians when eating disorder suspected

BODY DYSMORPHIC DISORDER (BDD)

BDD is a relatively common yet underdiagnosed psychiatric disorder. Patients with BDD:

- Are preoccupied with 1 or more perceived physical defects or flaws that others don't see, or see only as slight defects.^{DSM}
- Perceive minimal or nonexistent flaws to be unattractive or devastating and the cause of much anxiety or distress.
- Are more concerned if they have slight physical anomalies.
- Have significant distress or impairment in functioning as a consequence of distorted body image.
- Do not sway from their views, even when a physician reassures them that they look fine.^{PHI}

If an eating disorder patient is seeing a **plastic surgeon**, this may be a sign of BDD.

Medical care (PCP and/or psychiatrist/psychiatric APRN)

The primary goal of the physician is to ensure that the patient is stable, then work toward improving the patient's physical and mental health. **The physician covers many of the same topics as the dietitian and the therapist; all team members need to support what the other team members have told the patient**. In general, the physician needs 30 minutes per appointment.

A psychiatrist or psychiatric APRN is sometimes involved if the patient has significant comorbid mental health issues that require complex psychotropic medications or mental health issues that significantly compromise ability to function.

TABLE 9: Medical care focus and strategies

Focus

- Function (PCP and/or psychiatrist) assessment of day-to-day functioning by asking questions, such as:
 - How have you been doing since your last visit?
 - Is there a time of day that your behaviors are better or worse?
 - What helps you succeed (with changing behaviors, with treatment, etc.)? (Consider having the patient keep a food feeling diary, *see sidebar, page 11.*)
 - Are you taking your medications as prescribed?
 - Additional questions to develop rapport and further assess patient functioning (e.g., "How is school? Work? Family?").
- Mental status (PCP and/or psychiatrist) assessment of the patient's mental health with a standard mental status examination (MSE) and discussion of various topics, such as body image, stressors, and mental health issues.
- Physical health exam (PCP) checking and recording the following:
 - Vital signs blinded weight, height, BMI, BP, HR, temp, PAVS (see sidebar page 6)
 - Change in weight since last visit
 - Physical exam if necessary throat, heart, lungs, extremities, etc.
 - Repeated tests/exam items from diagnosis as necessary (see the Comprehensive medical evaluation section on page 6)
- Physical health discussion (PCP) health-related topics, such as:
 - A targeted symptom review: sleep, bowel habits, energy, urination, palpitations, other issues or concerns
 - Exercise PAVS (see page 6 sidebar)
 - Eating behaviors restriction, binging, purging, etc.
 - Exercise behaviors healthy and unhealthy (more than 60 minutes per day most days of the week) levels of exercise
- Medications (PCP and/or psychiatrist) prescribing and managing medications as needed.
- Other health needs as necessary (PCP) menstrual function, digestive issues, bone health, endocrinology manifestations, etc.
- Determining the level of care (PCP and/or psychiatrist) and where the patient is on the spectrum of care.
- **Consulting (psychiatrist)** working closely with the physician to manage medications and the impact of mental health disorders on the patient's health and well-being.

Strategies

- **Health and eating behaviors** teach about and encourage healthy behaviors with a focus on intake needed for health (in relation to output).
- **Follow up** initiate and drive care plan; follow up with patient regularly; ask the patient about meetings with the therapist and the dietitian.
- Psychotherapy (psychiatrist) see page 12 for details.

Nutrition support (registered dietitian)

The overall goal of nutrition support is to help the patient resume normal eating behavior through realistic goals and behavior change. The focus should be more on the patient's **relationship with food** and **how and why to eat** than on what to eat. The dietitian can help the patient make connections between food behaviors and emotions.

TABLE 10: Dietitian focus and strategies

Focus^{OZI}

- Function and physical health discussion see descriptions in Table 9 on the previous page.
- Eating disorder history and potential causes current and past eating behaviors, weight fluctuations, situations that may have triggered the start of the eating disorder, and the patient's goal weight (if applicable).
- Appropriate exercise and eating patterns current patterns; behaviors to avoid such as skipping meals, restricting a specific food group, and obsessively counting calories, carbohydrates, and fat; and appropriate and inappropriate exercise (based on the physician's recommendations).
- Body image issues disordered feelings about body image, self image, and self esteem.
- Stressors social, emotional, and family factors that prompt the behavior.
- **Food fears and challenges** emotional and physical hunger, relationship with food, fear/ challenge foods, food phobias, and food myths.
- Energy (food) and fluid Intake the amount, timing, and routine of intake; the importance of adequate intake; the benefits of carbohydrates, proteins, and fats; the effects of inadequate intake; nutrient deficiencies; blood sugar; and supplement/medication use.

Strategies

- Coping mechanisms replace stress responses with healthier coping mechanisms.
- Strategies to normalize food patterns
 - Use food feeling diaries to help patients notice thoughts that lead to behaviors and identify triggering foods or environments.
 - Identify ways to avoid binge/purge behaviors, such as avoiding triggers, seeking support when vulnerable, staying busy, and postponing the behavior as long as possible.
 - Create meal plans based on the individual patient, but generally starting with minimum meal plans, using safe foods as a foundation and slowly increasing intake of 'challenge' foods (to help patients move to intuitive eating over time).

• Working with family members -----

- Listen to the family's concern and answer questions.
- Educate family about realistic treatment expectations
- Ask for the patient's input: What can family do to help you? What helps and what doesn't help?
- Have the family plate food for the patient; remove labels from cans or cross out calories and fat on labels; observe the patient eating; and stay with the patient after meals.

MEAL PLANNING TECHNIQUES

The goal of meal planning for these patients is to return the patient to normal eating and behavior by:

- Reintroducing foods the patient avoided
- Challenging food fears and phobias
- Avoiding a "perfect" diet that eliminates or restricts some foods

Meal planning is individualized for the patient — there is no right or wrong way. Dietitians use a number of methods for meal planning.

Typically, dietitians discourage counting calories and weighing/measuring food for these patients.

FOOD & FEELINGS JOURNAL

The Intermountain *Food & Feelings* one-day journal connects emotions to eating behaviors; it has words on the back that help patients express how they're feeling — about food and their lives.

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INTUITIVE EATING

As the patient begins to recover, the dietitian may help the patient move toward intuitive eating. With intuitive eating, patients learn to:

- Respond to inner body cues.
- Distinguish between physical and emotional feelings.
- Listen to their hunger and fullness queues.

The 10 principles of intuitive eating are described here: <u>intuitiveeating.org/</u> <u>content/what-intuitive-eating</u>.^{IEP}

PATIENT PROGRESS AND REGRESSION

Often, a patient progresses in one area while regressing in another. For example, during periods of intense psychotherapy, a patient may inappropriately restrict caloric intake and lose weight to cope with the increased psychological risk. Or, when taking caloric risks at meals, a patient may be agitated and hopeless and may push away the therapist. Working with other members of the team to clarify the spotty nature of progress can help provide a more realistic picture of the patient's current needs. Recovery takes time — there are no quick fixes.

WHAT DEFINES SUCCESS?

Success can be challenging to define in eating disorder patients. Success may include the following:

- Reduction or resolution of eating disorder behaviors
- Eating enough to support growth and activity
- Improved function in school, work, relationships, etc.
- Reduction of thought disturbances related to food and body image
- Attainment of healthy weight
- Normalization of lab abnormalities
- Engagement in healthy physical activity
- Diminished comorbidity symptoms

WORKING WITH SUPPORT SYSTEMS

When appropriate, engage family and friends to support treatment:

- Help families understand eating disorders, and give them realistic expectations regarding recovery.
- Trust family concerns.
- Empower parents to listen to their children and find solutions that will be best for them.
- **Teach parents** about the warning signs of eating disorders (*see resources on page 20*).

Psychotherapy (psychologist, therapist, MHI care manager)

The overall goal of the psychotherapist is to develop a trusting interpersonal relationship with the patient.^{JOY} The techniques that follow are customized to the patient based on the style of the therapist, the presentation and needs of the patient, and the availability of community resources. Note that a psychiatrist or psychiatric APRN may fill this role.

TABLE 11: Psychotherapy focus and strategies

Focus

- **Body image** the function of certain body image tendencies (obsessive-compulsive tendencies, self esteem, gender roles, social anxiety, etc.).
- **Psychosomatic reactions** the interrelationship between body and mind; the effects of environmental or emotional stress on how the patient experiences physical symptoms, sensations, or urges; and the physical sensations that occur naturally after eating.
- **Physiology** reinforcement of positions established by other team members about fat metabolism, factors influencing body composition changes, fat vs. lean weight, frequency of weighing, appropriateness of and/or comfort with goal weight, etc.
- Psychological trauma past trauma (abuse, abandonment, injuries, etc.).
- Current situation current life circumstances and coping mechanisms.
- Psychological therapies for comorbid conditions anxiety, depression, substance abuse, etc.
- Care approach validation of care plan, level of care, etc.

Strategies

- **Cognitive behavioral techniques** work to change the way the patient feels, thinks, and acts by identifying thought patterns that reinforce eating disorder behaviors; work toward mastery of alternative reactions to negative thought processes.
- Feminist theory strategies empower women to push back against destructive cultural pressures.
- **Interpersonal therapy techniques** build a therapeutic relationship based on trust and openness and let the focus of treatment be guided by this relationship.
- **Psychodynamic psychotherapy** resolve specific conflict themes in the patient's life to reduce urges for eating disorder behaviors.
- **Family therapy** improve interpersonal conflict resolution, elicit greater family support and understanding, and clarify misconceptions (essential for child/adolescent patients and optional for adults).
- **Psychoeducation** clarify misconceptions and teach new methods for coping with stress, trauma, urges, etc.
- Desensitization training develop strategies to face irrational fears.

Establishing team communication methods

Each multidisciplinary team member **customizes the approach** for each patient. This makes regular communication between team members critical. The initial contact between team members is critical to establish roles and a communication plan.

Team members should communicate at least monthly (weekly for complex patients) to share information about the patient:

- What the patient is reporting to each team member (see Team splitting below)
- General medical condition
- · Specific medical risks
- Current status of associated behaviors
- Medication adjustments
- Effectiveness and side effects of medications

Communication methods

The team should work together to determine how they're going to communicate. The team can communicate in any way that works, including:

- In person. This is the ideal. The team could set up a weekly meeting over lunch or meet at someone's office.
- **By phone.** Team members should call each other as needed with updates, questions, and so on.
- Virtually. If resources are not available to form a multidisciplinary team, the team should consider virtual options (see sidebar).
- **By email.** Email is not ideal because it may not be secure. If you do need to email, type "PHI" (Protected Health Information) in the subject line; this prevents others from seeing the email. Also, delete the email from your sent box immediately.

Team splitting

Patients often attempt to divide treatment teams by forming an alliance with one member of the team against the others. Communication among the treatment team members can identify the presence of team splitting and allow the team to quickly isolate its impact on treatment. The team can implement a plan to normalize and use the splitting behavior to improve the patient's trust with the treatment team.

VIRTUAL TEAM OPTIONS: EATING DISORDER eCONSULT

Intermountain has assembled a team of eating disorder specialists — physicians, therapists, and dietitians — during a monthly online meeting. The goal is to educate providers about working with these patients. You have two options for participating in this meeting:

- Call in and listen. You can call in anytime and to hear patient cases and learn from your peers.
- Set an appointment to talk about your patient. Complete the <u>Eating</u> <u>Disorder eConsult Patient Information</u>

<u>Form</u>. Click the **Email** Form button in the bottom corner of the form, or email it to <u>linda.webb@imail.org</u>. We will let you know when to call in.



Dial-in information:

- WebEx Meeting ID: 624-968-041#
- Conference number: 801-442-6800 (toll free: 866-713-7506)
- Schedule: Third Thursday of each month from 12:30 to 1:30 PM

To learn more:

Visit <u>intermountain.net/Eating-Disorders</u> or <u>intermountainphysician.org/Eating-</u> <u>Disorders</u>.

VIRTUAL TEAM OPTIONS FUTURE PLAN: TeleHealth

Intermountain plans to provide tools for specialists at Intermountain referral centers to conduct audio/video consults with referring physicians or care for patients in remote TeleHealth Suites. This technology is under development.

A NOTE ABOUT HIPAA

While you don't need a signed release form for the members of the team to communicate, it is best to keep the patient informed about the team and the information you share.

The cost of multidisciplinary care — a case study

Because the multidisciplinary team model requires frequent visits to a physician, a dietitian, and a therapist, some have argued that the cost isn't worth the outcome. However, a comparison with the cost of inpatient, ED, or residential treatment shows that the team approach is much more cost effective.



INSURANCE AND OTHER PAYMENT OPTIONS

As the team develops a care plan for the patient, it's important to consider the cost to the patient.

 Insurance. Consider the patient's coverage when determining the treatment plan. For example, some plans don't cover dietitians or only cover a certain number of visits per year. In this case, the patient may see the physician more frequently and the dietitian less frequently.

• Other payment options. For many patients in residential care, payment comes from multiple sources, including health insurance, personal funds, charities, and religious institutions.

Meet Celia

Celia, who is 16, was diagnosed with anorexia nervosa. Celia's family is paying \$300 or more every week to see a physician, a therapist, and a dietitian. However, without multidisciplinary care, the disease may continue to progress, and she may require inpatient treatment. These costs would be significantly higher *(see tables below)*.

Lower costs

The average length of stay for inpatient/residential care is 30 to 60 days, which represents a total estimated cost of \$30,000 to more than \$100,000 (see Table 13). If the patient can be treated safely and effectively in the outpatient setting, that same sum of money could cover the cost of **more than 3 years of weekly multidisciplinary care**. In addition, insurance plans often cover a limited number of days of residential care.

TABLE 12: Case study: multidisciplinary team o	ost of care
Provider	Weekly cost*
Physician	\$100-\$200
Dietitian	\$100
Psychotherapist	\$100\$150
Total Weekly Cost	\$300-\$450

TABLE 13: Case study: inp	oatient cost of care	
Facility	Daily cost	Weekly cost*
Medical emergency department or inpatient care	\$2,700-\$3,000	\$18,900-\$21,000
Psychiatric inpatient care/ residential facility	\$1,000-\$1,700	\$7,000–\$11,900

*Estimated cost for a patient without insurance

Better outcomes

Cost savings for the patient and the healthcare system is not the only driver to prevent hospitalization — it's even more important to recognize that once a patient is hospitalized, the prognosis for a full recovery worsens (because hospitalization implies more severe disease). The goal of the multidisciplinary team should be to avoid hospitalization to improve patient outcomes.

GENERAL TREATMENT GUIDELINES

Follow the guidelines below, whether managing a patient with disordered eating or working with a multidisciplinary team to treat a patient with a diagnosed eating disorder.

General approach

- Maintain a weight-sensitive office. Respect patients' feelings, keep scales out of public view, and don't comment on a person's weight except in private (*see sidebar*).
- **Recognize societal influences.** The concept of "ideal thinness" exists in our culture, but often isn't realistic.
- **Respect the power of the illness.** Understand that it can be very challenging to change eating-related thoughts and behaviors. Simply providing advice to eat more is not likely to result in improvement.

Talking to the patient

Approaching conversations with patients in a sensitive way can result in more honest answers. For example, patients with eating disorders may hear something different than other patients when they hear a comment about appearance (e.g., "You look good today" sounds like "You're getting fatter" to a patient with anorexia). Follow these guidelines when talking to patients with eating disorders:

• Avoid overemphasis on weight as an indicator of general health. Eating disorder diagnosis is not defined by weight alone. Do not refer to body weight or overall appearance. Instead, compliment patients in ways that do not refer to the body.

TABLE 14: Conversational DO's and	DON'Ts with eating disorders
DO say (if true)	DON'T say (even if true)
 It looks like you are having a good day. I see you have a University of Utah logo on your shirt (or a BYU keychain). Do you or someone in your family go there? What does your day look like today? What have you been doing for relaxation (or fun or vacation) since we saw you last? Your eyes look very bright today. Your hair looks nice today. That's a great color on you. 	 You look like you have gained weight. You look good today. You look better today. You look more recovered. You look like you have been following the (meal/therapy/nutrition) plan. You are making progress in treatment. You must like how much better you look. You look so much better not being so thin.

- **Present your concerns to patients** (and their families when appropriate) in a sensitive and caring way.
- Communicate the importance of nutritional intake. See page 11.
- **Discuss the dangers of restriction** cognitive dysfunction; decreased BMI; fat storage; impacts on physical, psychological, and emotional functioning; and risk of binging.
- Encourage patients to educate themselves and be proactive. For any patient with a diagnosed or suspected eating disorder, it is helpful to provide the patient and family with information on the nature, course, and treatment of eating disorders (see page 20).

KEY PRINCIPLES

- Maintaining an environment that is appropriate for patients with eating disorders vastly improves the patient experience.
- All team members should follow these guidelines to support effective treatment for the patient.

MAINTAINING A WEIGHT-SENSITIVE OFFICE

- Face the patient away from the scale while weighing, and keep scales out of public view.
- Don't talk about a person's weight except in private.
- Avoid weight-related comments (see table at left).
- Be aware that patients may put weights in pockets or take other actions to increase weight during weigh-ins.
- Dietitians and mental health professionals may not need to weigh the patient if the PCP is doing this not facing another weigh-in can make appointments for psychotherapy or nutrition support more pleasant for the patient.

PATIENT EDUCATION

Education is a critical element of the treatment plan. Use Intermountain resources (which also provide links to other materials) to educate patients and their families:





Eating Disorders: Conversation Tips for Friends and Family

KEY PRINCIPLES

- Eating disorders are surprisingly common in adolescents in the ED; weight is not always a reliable sign.
- Some emergency symptoms can be signs of an eating disorder, and some emergency treatments can be dangerous for patients with eating disorders.
- If an adolescent or young adult patient presents with symptoms of eating disorders, check for admit orders from the PCP and/or screen for eating disorders.

MEDICAL RECORD REVIEW

- The electronic record may provide clinical notes from the patient's physician with reasons for admission and recommended emergency room and/ or inpatient management strategies.
- If an Intermountain patient presents with symptoms of an eating disorder, check the problem list in the patient's electronic record for anorexia nervosa, bulimia nervosa, binge-eating disorder, or another eating disorder.

TREATMENT TIPS

- Do not treat hypotension and bradycardia in patients with anorexia nervosa unless specific symptoms are present (dizziness, fatigue, syncope).^{MAS}
- Avoid rapid infusions of large volumes of fluid; they can precipitate heart failure in patients with compromised heart size and reduced cardiac index.
 Even in patients with normal cardiac function, rapid infusion may result in significant edema.^{MAS}
- Watch for serious dysrhythmia in patients below 70% of ideal body weight. Risk is high due to magnesium and phosphorus depletion, which can precipitate sudden cardiac risk and torsades de pointes.^{MAS}
- Consider giving **spironolactone** rather than thiazide or loop diuretics for edema.

DISCHARGE GUIDELINES

See the table on the next page for discharge criteria and the sidebar on page 18 for discharge guidelines.

EMERGENCY TREATMENT

Eating disorders are surprisingly prevalent among adolescent patients in the emergency department (ED). A recent study of emergency patients aged 14 to 20 showed that 16% screened positive for an eating disorder on a validated questionnaire.^{DOO} Patients with eating disorders don't always present with low weight; the same emergency study showed that 19.3% of the emergency room patients who screened positive for an eating disorder were overweight, and 11.5% were obese.

- **Patients currently under treatment:** Some eating disorder patients will arrive at the ED with **admit orders** from a member of a multidisciplinary treatment team. However, patients may not always volunteer this information, so it's important to review the patient record or call the patient's PCP if patients present with symptoms that may be signs of an eating disorder.
- Patients who have undiagnosed eating disorders: Especially with teenagers and young adults, watch for symptoms that may be signs of an eating disorder. If there is no diagnosis in the patient record but you suspect an eating disorder based on the patient's symptoms, use the Modified ESP for screening (see Table (b) on page 5). For more information on diagnosis, see pages 6–7.

If an admit order is not present, the **admission criteria** on the following page can guide this decision.

TA	BLE 15: Signs of ea	ating disorders in the ED ^{MAS}
	Symptoms	Notes
	Vitals: low BP or decreased heart rate	 Consider admitting for telemetry (if asymptomatic) or for close monitoring and management of symptoms (dizziness, fatigue, syncope). Avoid rapid infusions of fluid, which can lead to heart failure in low-weight patients.
	Arrhythmia signs: weakness, fainting, palpitations	 Order baseline ECG; if it reveals prolonged QT, identify cause beyond simple malnutrition (often hypokalemia or hypomagnesemia; may be medication-induced).
norexia)	Chest pain	 Order an ECG to evaluate for acute coronary syndrome. Chest pain may also be a sign of mitral valve prolapse, seen in 30% to 50% of patients with severe anorexia (usually benign unless accompanied by arrhythmia).
Restricting (anorexia)	Musculoskeletal complaints	 Consider a physical exam to exclude spontaneous or low-impact fractures in patients with anorexia nervosa, especially if the patient has hip or low back pain.
Restri	Signs of refeeding syndrome	 Risk factors include <70% of ideal body weight, abnormal electrolytes, and little or no intake (<500 kcal per day) for 10 days. See notes on refeeding syndrome in the <i>sidebar on page 17.</i>
	Hypoglycemia, which can lead to seizures	 May be a sign of liver dysfunction; order liver function tests. Check medication list for medications affected by decreased liver function.
	Lower GI: pain, diarrhea, abdominal cramping, constipation	 Consider using a nonstimulant laxative to combat constipation/bloating and keep the patient hydrated. Superior mesenteric artery (SMA) syndrome can result from loss of visceral fat associated with restricted eating and weight loss.
Purging (anorexia or bulimia)	Blood: hypovolemia, hypokalemia, metabolic alkalosis	 Adjust IV boluses (if warranted) of fluid to the patient's weight; rapid infusions of fluids can cause edema (purging causes patients to retain salt and water). These patients can gain 10 pounds of edema if purging is abruptly stopped, and edema can be a trigger for the eating disorder. Vomiting or diuretics lead to dehydration, increased sodium and bicarbonate absorption and decreased potassium and hydrogen absorption. Normal saline is a key component when treating for potassium deficiency. When the patient is hydrated, the patient will need much less potassium to replenish stores than would be predicted for the serum potassium level.^{MAS}
rging (anor	Upper GI: hoarseness, dysphagia, heartburn, hematemesis	 Order an ECG to evaluate for arrhythmia. Self-induced vomiting can cause gastric reflux symptoms. Hematemesis can be a sign of Mallory-Weiss syndrome (tearing in the esophagus or stomach from self-induced vomiting).
Pu	Lower GI: pain, diarrhea, abdominal cramping, constipation	 Consider using a nonstimulant laxative to combat constipation/bloating and keep the patient hydrated. Symptoms may be caused by laxative abuse; detoxing can be difficult.

► INPATIENT TREATMENT

Patients with eating disorders are admitted to inpatient treatment either from the emergency department or based on the recommendation of the multidisciplinary team. The multidisciplinary team should take an active role in inpatient treatment if possible.

TABLE 16: Admission and	l discharge criteria ^{APA,INQ,MAS}
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Admission criteria	Discharge criteria
 One or more of the following: Unable to function in environment Weight less than 75% of ideal body weight (IBW) Rapid/persistent uncontrolled weight loss (10% to 15% weight loss over 30 days prior to admission) Repeated syncopal episodes Severe laboratory disturbances (e.g., K+ <2.5, Na+ <125, GLU <50) Significant cardiac arrhythmia (HR <50 for adults; <45 for pediatric or adolescent patients) Significant hypotension (BP <90/50) Suicidal intent Prolonged lack of expected growth or development (pediatric or adolescent 	 80% of ideal body weight (IBW) (if possible) Stop further weight loss and purging behavior (if applicable) Stable vital signs and laboratory values Balanced electrolytes Resolution of serious cardiac arrhythmia Tolerating enteral feeding, adequate PO intake (combined enteral and oral intake meets total nutritional goal) Not a suicide risk Transfer to inpatient residential treatment center See page 18 sidebar for discharge guidelines.

Criteria for nutrition intervention

patients)

Initiate nutrition interventions in addition to oral diet if the patient meets any of the following criteria:

- Low body weight: For adult patients, <75% calculated IBW; for pediatric and adolescent patients: <75% expected weight based on historical growth data and developmental stage
- Rapid uncontrolled weight loss: order calorie count to determine intake needs
- **Complications of restricted intake:** hypotension, bradycardia, hypothermia, syncope, recurrent near syncope

See inpatient feeding guidelines on the next page.

✓ KEY PRINCIPLES

- Some treatments can be dangerous for patients with eating disorders.
- Closely monitoring patients is critical to care for patients with eating disorders.
- Focus on oral intake for patients with eating disorders (instead of enteral feeding).

MEDICATIONS DURING INPATIENT TREATMENT

Prescribe SSRIs, anxiolytics, sleep aids, atypical neuroleptics, and other medications as needed to stabilize the patient. *See page 19* for a full list of possible medications.

REFEEDING SYNDROME

Refeeding syndrome describes the potentially fatal fluid and electrolyte shifts that can occur when refeeding a malnourished patient and can result in cardiac and/or respiratory failure, gastrointestinal problems, delirium, or death. To prevent refeeding syndrome, refeed slowly, adjusting to the age, developmental stage, and degree of malnourishment of the patient.^{AED}

UNDERFEEDING

Underfeeding can lead to further weight loss and even death in seriously malnourished patients. To prevent underfeeding, frequently reassess and increase calories as soon as it is deemed safe.^{AED}

RESIDENTIAL TREATMENT

For patients unable to function in their environments, residential treatment provides a highly structured environment that promotes healthy eating and weight gain (if indicated), changes destructive behaviors, and provides insight and coping skills.

INTENSIVE OUTPATIENT TREATMENT

After residential treatment, patients undergo full-day, intensive outpatient treatment. This is a transitional program out of residential treatment back into free living. The patient continues multidisciplinary care if needed. Intensive outpatient treatment may also be called day treatment or partial hospitalization.

FOLLOW-UP

The multidisciplinary team should follow up with the patient after discharge from inpatient treatment:

- Physician: within 1 week of discharge
- Dietitian: within 1 week of discharge
- Therapist: within 1 or 2 days of discharge

DISCHARGE GUIDELINES

It is critical to discharge patients with eating disorders to knowledgeable physicians. When patients meet the discharge guidelines outlined on the previous page, do one of the following:

- If the patient has a multidisciplinary team, inform the physician that the patient is being discharged.
- If the patient does not have a multidisciplinary team:
 - For SelectHealth patients, call SelectHealth at 801-442-1989 for a list of providers.
 - For non-SelectHealth patients, call local outpatient clinics or members of your professional network to find a physician.

TABLE 17: Inpatient feeding guidelines

Adult feeding guidelines

The CPM team recommends the following for enteral feeding (if the patient meets the criteria for nutritional intervention on the previous page); this most likely mimics the feeding schedule used in the outpatient setting. We recognize that some patients will need modifications based on unique health needs.

- 2 kcal/cc enteral feeding solution; 240 cc/ can (e.g., Nutren 2.0)
- Overnight feedings for 10 to 12 hours while patient sleeps
- Rate of 48 cc/hour over 10 hours (10 PM until 8 AM)
- Electrolyte replacement for patients with purging behavior and electrolyte disturbances (with or without restricted eating behaviors)
- Monitor potassium, magnesium, and phosphorus for refeeding syndrome (see sidebar on page 17)

Note: Patients taking in about 1,000 kcal/ day (based on diet history) can start with 2 cans of feeding solution (480 cc/960 kcal).

Child/adolescent feeding guidelines

Estimate the patient's average daily intake, then initiate oral feeding:

- 3 meal/3 snack regimen (increasing daily from initial to full amount)
- All meals delivered by clinical staff after ensuring completeness of tray
- 30 minutes to consume all nutritional items (consider patient attendant); if unable to tolerate full meal/snack at 30 minutes:
 - Liquid nutrition supplement with 30 minutes to consume (≥ total caloric amount of meal/snack not consumed)
 - If unable to tolerate full liquid supplement, temporary NG tube for nutrition delivery

Note: If necessary for medical stability, consider short-term enteral feeding. Follow adult feeding guidelines.

Team member roles in inpatient care

The patient's **multidisciplinary team** should communicate with the inpatient care team if possible. This section provides additional guidelines for nurses, mental health professionals, and dietitians at the facility.

Nursing staff should perform the following during inpatient treatment:

- Check orthostatic vitals every morning.
- Monitor enteral feeding volume closely.
- Ideally, observe mealtimes; encourage completion of meals.
- Discourage the patient from locking the bathroom door and running the sink.
- Restrict activity (generally not allowed off unit unsupervised).
- Encourage snacking and nutritional supplements.
- Offer calorie-containing liquids (soda, juice, milk) rather than water and diet soda.

A **mental health professional** should also be involved in treatment. Ideally, the patient's own therapist should make inpatient rounds as often as possible. Additionally, the team can involve unit social workers and religious personnel as needed.

A **psychiatry consult** should be considered in patients with comorbid mental health conditions (e.g., depression, anxiety, bipolar disorder, obsessive compulsive disorder) that are complicating and/or exacerbating the eating disorder.

An inpatient dietitian calculates nutrition needs and coordinates daily calorie counts.

The patient's **outpatient dietitian** should be available to talk with hospital staff and the patient and coordinate the outpatient dietary plan if possible.

MEDICATION MANAGEMENT

In general, medications are prescribed to patients with eating disorders to treat comorbid conditions, manage physical complications, and reduce anxiety. Target symptoms should be established with the patient and monitored carefully. Ineffective medications should be discontinued after an adequate trial.

TABLE 18: Medica	tion and eating disorders ^{APA}
Medication category	Considerations and guidelines
Selective serotonin reuptake inhibitors (SSRIs)	 Widely used (along with therapy) to treat patients with anorexia nervosa or bulimia nervosa, and comorbid depression, anxiety, or obsessive-compulsive symptoms. Do not appear to help patients with eating disorders gain weight.
Bupropion (Wellbutrin)	 Use with extreme caution in patients with high likelihood of electrolyte disturbances. FDA black box warning for patients with eating disorders because of increased risk for seizures.
Tricyclic antidepressants (TCAs), monoamine oxidase inhibitors (MAOIs)	 Generally not used for these patients because adverse reactions are more pronounced in malnourished patients. Has an increased risk of morbidity and mortality from overdose with these patients. TCAs don't work for adolescents with depression or anxiety.
Second-generation antipsychotics (especially olanzapine, risperidone, quetiapine)	 May be useful in patients with severe, unremitting resistance to weight gain or severe obsessional thinking. May present a higher risk for side effects for these patients. Ziprazidone requires careful QT monitoring due to the risk of QT prolongation in patients with anorexia nervosa.
First-generation antipsychotics (e.g., chlorpromazine)	May be helpful in small doses before meals to reduce anxiety.
Benzodiazepines	 May be useful when taken selectively before meals, but should be used carefully because these patients have a high propensity for dependency. Duration depends on treatment response. Limit duration for children and adolescents (no longer than 3 months if taken daily).
Topiramate	 Can be used as an antianxiety medication; to control binging and purging; and to promote weight loss for patients with a binge-eating and/or purging disorder.
Promotility agents (e.g., metaclopramide)	 Occasionally used to reduce abdominal discomfort during refeeding. Monitor carefully for extrapyramidal side effects. NOTE: Erythromycin can be taken before meals to stimulate bowel motility.
Proton pump inhibitors (e.g., omeprazole)	Used to treat symptoms of gastroesophageal reflux.
Sleep aids (e.g., zolpidem, melatonin)	 Can be safely used with eating disorder patients. Avoid trazodone if possible due to higher risk of orthostatic hypotension.

SUPPLEMENTS

Consider the following supplements to help patients restore nutrients and to foster weight gain:

- **Calcium** supplement to ensure 1,200 to 1,500 mg total daily intake
- Vitamin D 400 to 800 IU daily, especially November to May in Utah
- Zinc sulfate 50 to 100 mg daily to improve taste and appetite
- Iron 325 mg daily if anemic or iron deficient
- Mineral and vitamin supplements

In addition, fiber supplements may be needed for constipation.

A NOTE ABOUT ECT

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Electroconvulsive therapy may be usedful only when treating patients with severe comorbid disorders.^{APA}

► RESOURCES AND REFERENCES

Patient and family resources

Eating Disorders	
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<u>Eating Disorders.</u> This 4-page fact sheet provides an overview of eating disorders, diagnosis, and treatment.

Eating Disorders: Conversation Tips for Fri	ends and Family
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Eating Disorders: Conversation Tips for Friends and Families. This 2-page fact sheet provides key information for friends, family, and partners in how to best communicate with and support a person with an eating disorder.

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Food & Feelings 1-day Journal.

This patient tool helps patients track how their emotions affect their eating habits.

PATIENT RESOURCES ON THE WEB

Intermountain web resources. Patients can also access information about eating disorders directly from Intermountain's Health Resources: intermountainhealthcare.org/health, Health Topic Library.

Other web resources:

- The National Eating Disorders Association (NEDA): <u>nationaleatingdisorders.org</u>
- Parent Toolkit provided by NEDA: <u>nationaleatingdisorders.org/parent-toolkit</u>
- Eating Disorders booklet provided by the National Institute of Mental Health: <u>nimh.nih.gov/health/publications/</u> eating-disorders/eating-disorders.pdf
- Center for Change: centerforchange.com
- Avalon Hills Residential Eating Disorder Program: <u>www.avalonhills.org</u>

Provider resources

Access this CPM and other resources from:

- intermountainphysician.org/Eating-Disorders
- intermountain.net/Eating-Disorders



Intermountain Eating Disorder eConsult

A team of eating disorder specialists provides support for healthcare providers during this monthly meeting:

- Third Thursday of each month (starting September 2013) from 12:30 to 1:30 рм
- WebEx meeting ID: 624 968 041, phone: 801-442-6800
- Four appointments per meeting avaiable (or call in to listen anytime)

Visit intermountainphysician.org/Eating-Disorders and intermountain.net/Eating-Disorders to register for the eConsult and download the <u>Eating Disorder eConsult Patient Information Form</u>.



Eating disorders materials

- <u>Eating Disorders CPM Reference List</u>
- Eating Disorders eConsult Patient Information Form
- Eating Disorders Best Practice Flash Card

Mental Health Integration (MHI) materials

- <u>MHI CPM</u>
- MHI Scoring and Tracking Sheet and other tools

Other related materials

- Depression CPM and associated tools
- Bipolar Disorder CPM and associated tools

This CPM presents a model of best care based on the best available scientific evidence at the time of publication. It is not a prescription for every physician or every patient, nor does it replace clinical judgment. All statements, protocols, and recommendations herein are viewed as transitory and iterative. Although physicians are encouraged to follow the CPM to help focus on and measure quality, deviations are a means for discovering improvements in patient care and expanding the knowledge base. Send feedback to Mark Foote, MD, Intermountain Healthcare, Behavioral Health Medical Director (*mark.foote@imail.org*).