7-2023

Eating Disorders - Medical Work-up and Stabilization

Children's Mercy Kansas City

These guidelines do not establish a standard of care to be followed in every case. It is recognized that each case is different and those individuals involved in providing health care are expected to use their judgment in determining what is in the best interests of the patient based on the circumstances existing at the time. It is impossible to anticipate all possible situations that may exist and to prepare guidelines for each. Accordingly, these guidelines should guide care with the understanding that departures from them may be required at times.

Eating Disorders – Medical Work-up and Stabilization
Clinical Pathway Synopsis

Eating Disorders: Workup and Pre-Admission Algorithm

Inclusion criteria:
Patients with concern for eating disorder with an associated medical complication:
- Electrolyte abnormalities
- Bradycardia
- Hypotension
- Pericardial effusion
- Superior mesenteric artery syndrome
- Anemia
- Renal injury
- Erosion of dental enamel and dental caries
- Delayed wound healing
- Persistent metabolic alkalosis
- Neutropenia
- Height stunting
- Secondary amenorrhea
- Dizziness/Syncope
- Hypoglycemia
- Abnormal liver function tests
- Frequent fractures or stress fractures

Exclusion criteria:
- Patient avoids eating due to medical issues
- Patient avoids eating due to a mental health condition other than fear of weight gain or body image concerns
- Patient avoids eating due to sensory issues
- Patient is medically stable

Patient presents to UCC, ED, ambulatory clinic, or PCP with concern for eating disorder and an identified medical complication

Outpatient Assessment
- Obtain weight, full vital signs including temperature, orthostatic heart rate and blood pressure (supine and standing), and last menstrual period.
- Full review of systems with focus on gastrointestinal, cardiac, neurologic, and last menstrual period
- Head to toe exam with focus on work of breathing, edema, heart sounds, perfusion

To help further guide assessment, the SCOFF screening tool can be utilized

Initial Labs & Studies

• Point of Care blood glucose	• Amylase
• Complete blood count with differential	• Lipase
• Basic metabolic panel	• Vitamin D deficiency
• Magnesium	• Urinalysis
• Phosphorus	• Thyroid-stimulating hormone
• Liver function tests	• Electrocardiogram (EKG)
• Iron studies	

Does patient meet admission criteria?

No → **Off guideline**
- Proceed with additional work-up for weight loss as medically indicated
- If there are concerns for eating disorder - provider to make referral to the Eating Disorder Clinic

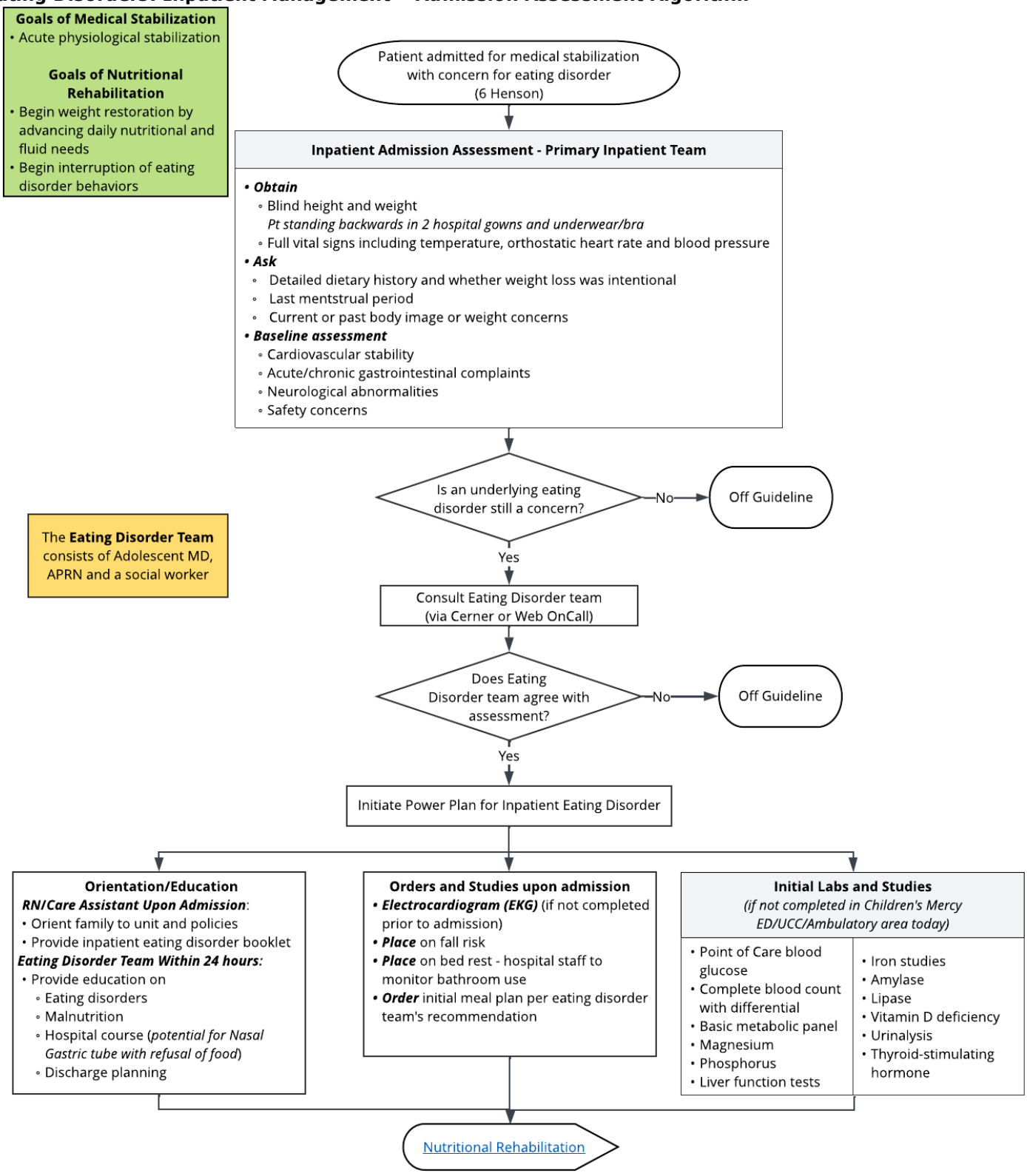
Yes

Call 1800GoMercy
To consult with Eating Disorder provider on call to guide admission for medical stabilization

Admit patient for medical stabilization

Admission Assessment

Eating Disorders: Inpatient Management – Admission Assessment Algorithm



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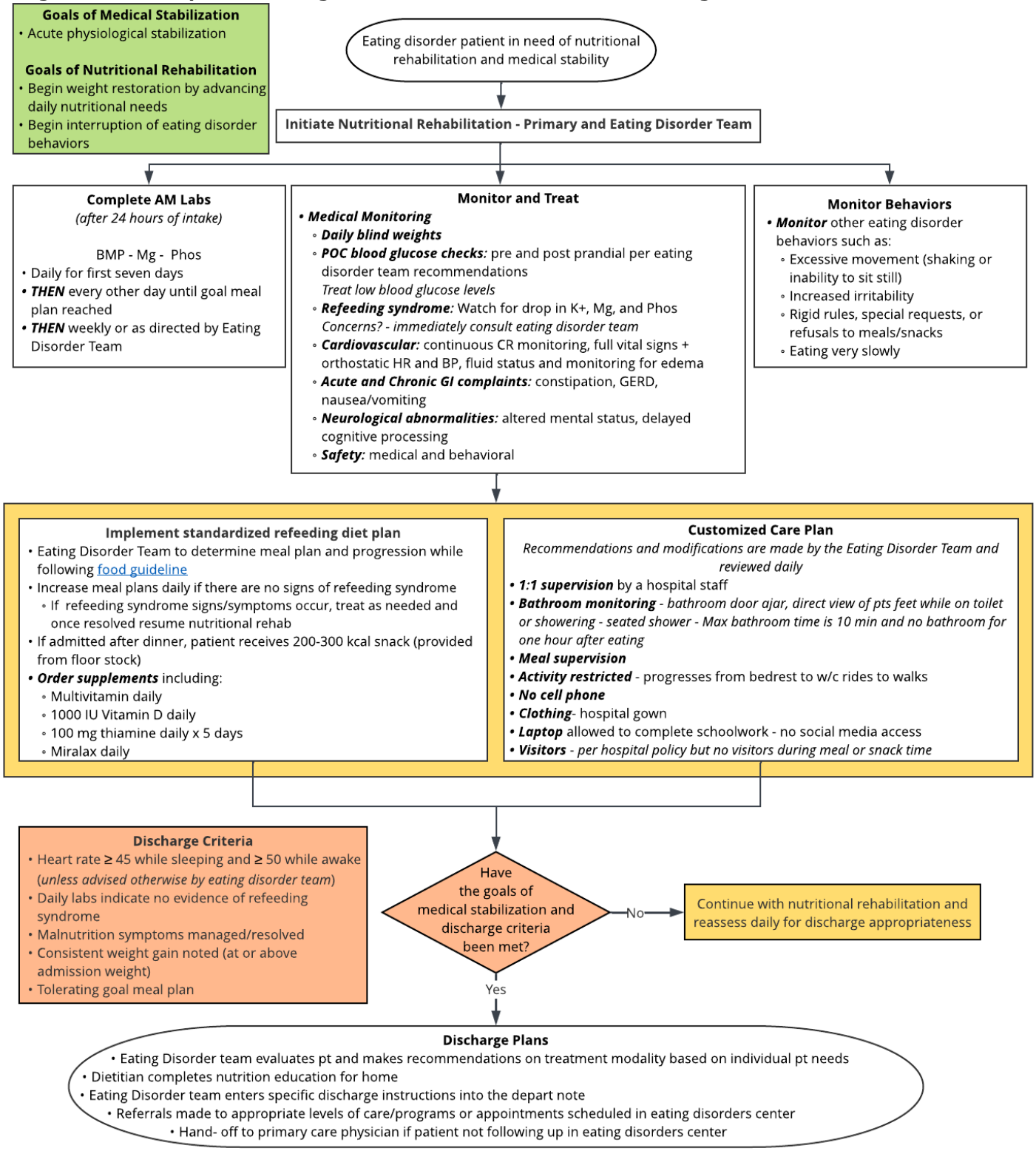
Eating Disorders: Inpatient Management – Nutritional Rehabilitation Algorithm



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The Objective of the Clinical Pathway

To provide care standards for the patient diagnosed with an eating disorder and identify concerns for medical instability due to malnourishment.

Background

Eating disorders are mental illnesses related to genetic, personality, behavioral, and environmental factors that can result in significant medical complications due to disturbance in eating patterns and behaviors (NEDA, 2022). They have the second highest mortality rate of any psychiatric disorder and can negatively impact relationships and daily function (ANAD, 2023). Due to this disorder's severity and multifactorial nature, they require intensive, multidisciplinary treatment, prioritizing medical stabilization (AED, 2021). The complexity of identifying an eating disorder and the specialized knowledge necessary to quickly intervene and stabilize patients led to the development and implementation of this clinical pathway.

Target Users

- Attending Physicians/Fellows/Residents
- Nurses
- Dietitians
- Social Workers

Target Population

Inclusion Criteria

- Patients with concern for weight loss and/or eating disorder with an associated medical complication
    - Electrolyte imbalance
    - Bradycardia
    - Hypotension
    - Prolonged QT interval – Defined as *longer than usual time for the heart to recharge between beats*
    - Pericardial effusion
    - SMA syndrome (bowel obstruction)
    - Anemia
    - Renal failure
    - Osteopenia
    - Erosion of dental enamel and dental caries
    - Delayed wound healing
    - Infections
    - Persistent metabolic alkalosis

Exclusion Criteria

- Patients that avoid eating due to medical issues
- Patients that avoid eating due to mental health conditions other than fear of weight gain or body image concerns
- Patients that avoid eating due to sensory processing issues
- Medically stable patients

Practice Recommendations

Please refer to the American Academy of Pediatrics (Hornberger et al., 2021) Clinical Report and the Academy for Eating Disorders 2021 Report (4th ed.) for full practice, evaluation, and treatment recommendations.

Additional Questions Posed by the Eating Disorders Clinical Pathway Committee

No clinical questions were posed for this review.

Recommendations Specific for Children's Mercy

Children's Mercy adopted the majority of the practice recommendations made by the 2021 AAP Clinical Report and the 2021 AED Report. Variations/Additions include:

- **Work-up and pre-admission** now includes an optional screening tool (the SCOFF, *see Appendix*) to further guide assessment for the UCC, ED, ambulatory or PCP provider.

- **Admission Criteria for Medical Stability** (patient with an eating disorder) is a summation of past guidelines and includes the use of ideal body weight (IBW) instead of body mass index (BMI) as the IBW more accurately reflects body weight in adolescents and children leading to proper dosing of many medications (Kang et al., 2019).
- **Assessment** guidance is based on Children's Mercy-specific parameters designed to guide the clinician on key evaluation components. These include:
    - Morning weights
    - Continuous cardiorespiratory monitoring
    - Bathroom use (monitoring for eating disorder behaviors and symptoms of malnutrition, *e.g., reduced appetite, lack of interest in food or drink, feeling tired all the time, feeling weaker, wounds taking a long time to heal, feeling cold most of the time, poor concentration*)
    - Activity progression (e.g., up in a chair, wheelchair rides, walks)
    - Gastrointestinal symptom treatment (i.e., MiraLAX, simethicone, omeprazole)
    - Other eating disorder behaviors (e.g., hiding food, over-exercising, researching eating disorder facts)
- **Intervention** for a standardized refeeding diet plan is customized per individual needs for patients at Children's Mercy:
    - Using a sliding scale for nutrition supplements and meal plans based on Food Service availability of certain foods
    - Food guidelines are developed through time limits for eating meals and/or supplements and parents choosing food
- **Discharge criteria** include:
    - Considers heart rate levels
    - Develops an individualized treatment plan following hospitalization
- **Eating disorder consultation** establishes parameters that focus on medical stabilization with psychological needs as a secondary intervention as necessary.

Measures

- Referrals to the Eating Disorders Team for inpatient admissions that met the criteria for the inpatient treatment program
- Length of stay for patients on the inpatient treatment program for medical stabilization
- Increasing referrals from community physicians

Value Implications

The following improvements may increase value by reducing healthcare and non-monetary costs (e.g., missed school/work, loss of wages, stress) for patients and families and reducing costs and resource utilization for healthcare facilities.

- Decreased risk of overdiagnosis
- Decreased risk of overtreatment
- Decreased frequency of re-admission
- Decreased inpatient length of stay
- Decreased unwarranted variation in care

Organizational Barriers and Facilitators

Potential Barriers

- Variability of an acceptable level of risk among providers
- Challenges with follow-up faced by some families

Potential Facilitators

- Collaborative engagement across care continuum settings during clinical pathway development
- High rate of use of the clinical pathway

Diversity/Equity/Inclusion

With eating disorders affecting people of all ages, genders, races, abilities, and socioeconomic statuses, we aim to provide equitable care for all individuals impacted by an eating disorder. These issues were discussed with the Eating Disorders Committee, reviewed in the literature, and discussed before making practice recommendations.

Power Plans
- Eating Disorder Admission
- Eating Disorder Meal Plan

Associated Policies
- Nutrition Assessment of Inpatients with an Eating Disorder Admitted for Medical Stabilization

Education Materials
- There are no general education materials as part of this clinical pathway

Clinical Pathway Preparation

This product was prepared by the Evidence Based Practice (EBP) Department in collaboration with the Eating Disorders Clinical Pathway Committee, composed of content experts at Children's Mercy Kansas City. The development of this product supports the Quality Excellence and Safety Division's initiative to promote care standardization evidenced by measured outcomes. If a conflict of interest is identified, the conflict will be disclosed next to the committee member's name.

Eating Disorders Clinical Pathway Committee Members and Representation
- Amanda Dietz, APRN, FNP-C, PMHS | Adolescent Medicine | Committee Chair
- Jamie Reasoner, MD | Hospital Medicine | Committee Member
- Emily Reilly, LSCSW, LSCW | Social Work | Committee Member
- Rhonda Sullivan, MS, RD, SCP, LD | Nutrition | Committee Member

Patient/Family Committee Member
- Patient and Family Advisory Committee for Eating Disorders | Reviewer

EBP Committee Members
- Todd Glenski, MD, MSHA, FASA | Anesthesiology, Evidence Based Practice
- Andrea Melanson, OTD, OTR/L | Evidence Based Practice

Clinical Pathway Development Funding

The development of this clinical pathway was underwritten by the following departments/divisions: Adolescent Medicine, Hospital Medicine, Social Work, Nutrition, and Evidence Based Practice.

Conflict of Interest

The contributors to the Eating Disorders Clinical Pathway have no conflicts of interest to disclose related to the subject matter or materials discussed in this care process.

Approval Process
- This product was reviewed and approved by the Eating Disorders Clinical Pathway Committee, Content Expert Departments/Divisions, two community providers, and the EBP Department.
- Products are reviewed and updated as necessary every three years within the EBP Department at CMKC.
- Content expert teams are involved with every review and update.

Review Requested

Department/Unit	Date Approved
Adolescent Medicine	June 2023
Hospital Medicine	June 2023
Social Work	June 2023
Nutrition	June 2023
6 Henson	June 2023
Evidence Based Practice	June 2023

Version History

Date	Comments
June 2023	Version one – created a formalized algorithm and synopsis.

Date for Next Review

- July 2026

Implementation & Follow-Up

- Once approved, the care process was presented and implemented to the appropriate care teams.
- Care measurements will be assessed and shared with appropriate care teams to determine if changes need to occur.
- Education was provided to all stakeholders:
  - Nursing units where the Eating Disorders Clinical Pathway is used
  - Department of Social Work and Nutrition
  - Providers from Adolescent Medicine and Hospital Medicine
    Resident physicians
- Additional institution-wide announcements were made via email, the hospital website, and relevant huddles.
- Metrics will be assessed and shared with appropriate care teams to determine if changes need to occur.

Disclaimer

When evidence is lacking or inconclusive, options in care are provided in the supporting documents and the power plan(s) that accompany the clinical pathway.

These pathways do not establish a standard of care to be followed in every case. It is recognized that each case is different, and those individuals involved in providing health care are expected to use their judgment in determining what is in the best interests of the patient based on the circumstances existing at the time.

It is impossible to anticipate all possible situations that may exist and to prepare clinical pathways for each. Accordingly, these pathways should guide care with the understanding that departures from them may be required at times.

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Appendix

Children's Mercy KANSAS CITY

SCOFF Questionnaire

The SCOFF Questionnaire (Morgan et al., 1999) is a five-question screening tool designed to detect the presence of an eating disorder of any type. A positive score on the SCOFF (≥2) indicates suspicion of an eating disorder, for which further evaluation with an eating disorder specialist is recommended to confirm an accurate diagnosis. The questions may be delivered verbally as part of an overall health evaluation. This tool can be used in the general population to identify people who may be at risk or have an eating disorder.

S – Do you make yourself **S**ick (throw up) because you feel uncomfortably full?	Y/N
C – Do you worry you have lost **C**ontrol over how much you eat?	Y/N
O – Have you recently lost more than **O**ne stone (approximately 14 pounds) in a 3-month period?	Y/N
F – Do you believe yourself to be **F**at when others say you are too thin?	Y/N
F – Would you say you have thoughts and fears about **F**ood and weight that dominate your life?	Y/N

Scoring: Each "yes" response to the five yes/no questions on the SCOFF is summed for the total score. Scores of 2 or greater indicate a likely case of an eating disorder (sensitivity: 100 percent; specificity: 87.5 percent). Consult an eating disorder specialist as necessary.

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