Disordered Eating Pediatric Inpatient Clinical Pathway

INTERMOUNTAINPROJECT ECHO – EATING DISORDERS

OCTOBER 17, 2019

Today

- How we got here
- Daily work flow
- Behavioral Health role, Stages of Stabilization
- Dietitian role and feeding plan
- Nursing role
- Family role, expectations, introductory letter
- Discharge Plan
- Questions

Hospitalists took over April 1, 2019

Now

Multi-disciplinary team working together for 24 months and ongoing

Created a “Pediatric Inpatient Clinical Pathway”

PDSA cycles for each patient and then aggregate data review quarterly

Constant feedback for improvement

Merging with Intermountain Healthcare Care Process Model

Near Future

Streamline into IHC Care Process Model and disseminate to rest of Intermountain hospitals

Hospitalists

Amber Chambers

Irene Kocolas

Bryan Stone

Nurses

Elizabeth Corless

Karmella Koopmeiners

Sheila Behunin

Karen Talbot

Intermountain

Carrie Grant

Lauren Allen

Elizabeth Joy

Dietitians

Kelsey Wild

Becky Hurst-Davis

Amelia Davidson

Behavioral Health

Laura Bennett Murphy

Lisa Giles

Adolescent Medicine

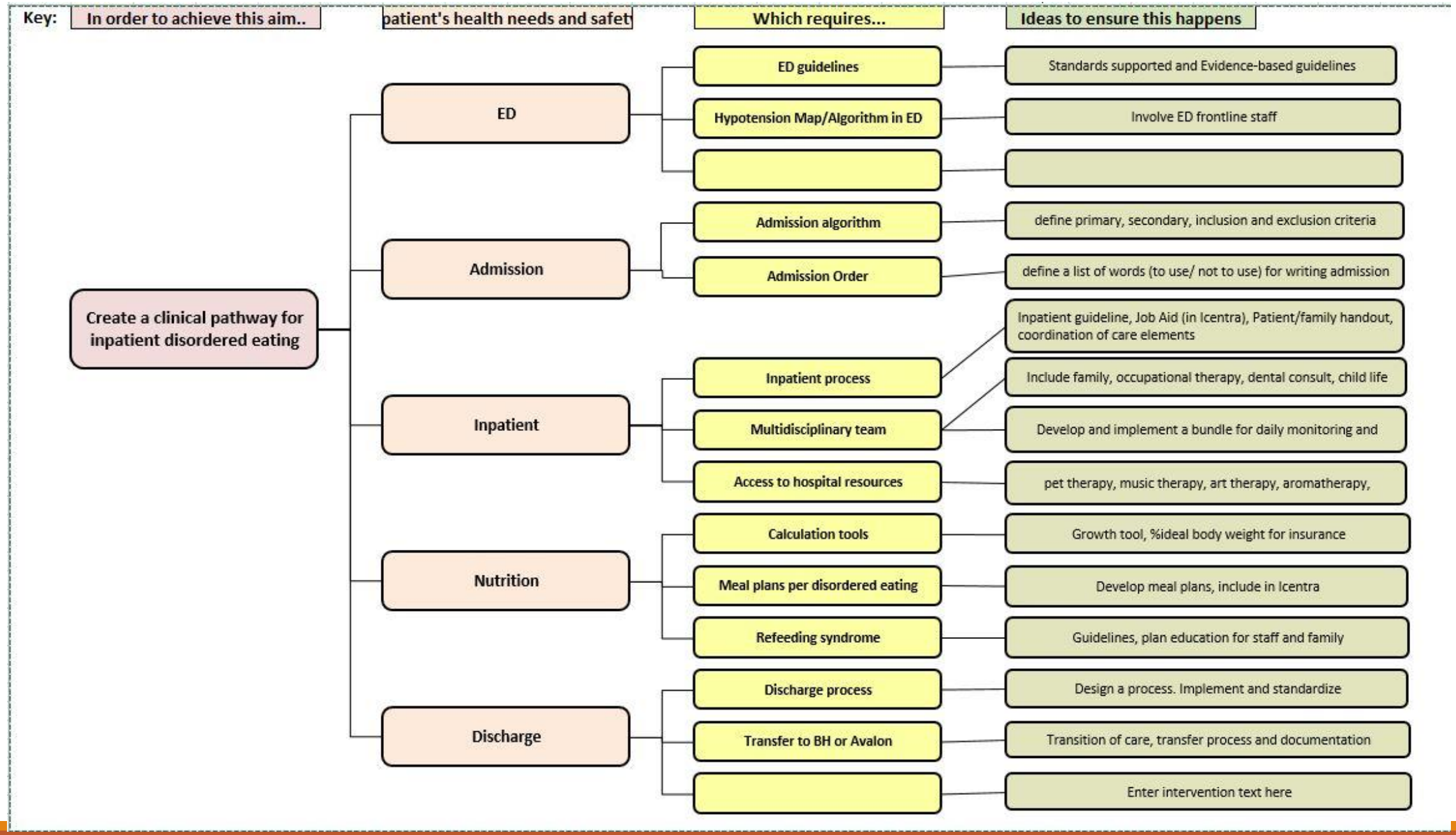
Nikki Mihalopoulos

Gastroenterology

Dan Jackson

Quality Consultant

Mouna Bahsoun


Key:
In order to achieve this aim..
patient's health needs and safet
Which requires...
Ideas to ensure this happens
Create a clinical pathway for inpatient disordered eating
ED
ED guidelines
Standards supported and Evidence-based guidelines
Hypotension Map/Algorithm in ED
Involve ED frontline staff
Admission
Admission algorithm
define primary, secondary, inclusion and exclusion criteria
Admission Order
define a list of words (to use/ not to use) for writing admission
Inpatient
Inpatient process
Inpatient guideline, Job Aid (in Icentra), Patient/family handout, coordination of care elements
Multidisciplinary team
Include family, occupational therapy, dental consult, child life
Develop and implement a bundle for daily monitoring and
Access to hospital resources
pet therapy, music therapy, art therapy, aromatherapy,
Nutrition
Calculation tools
Growth tool, %ideal body weight for insurance
Meal plans per disordered eating
Develop meal plans, include in Icentra
Refeeding syndrome
Guidelines, plan education for staff and family
Discharge
Discharge process
Design a process. Implement and standardize
Transfer to BH or Avalon
Transition of care, transfer process and documentation
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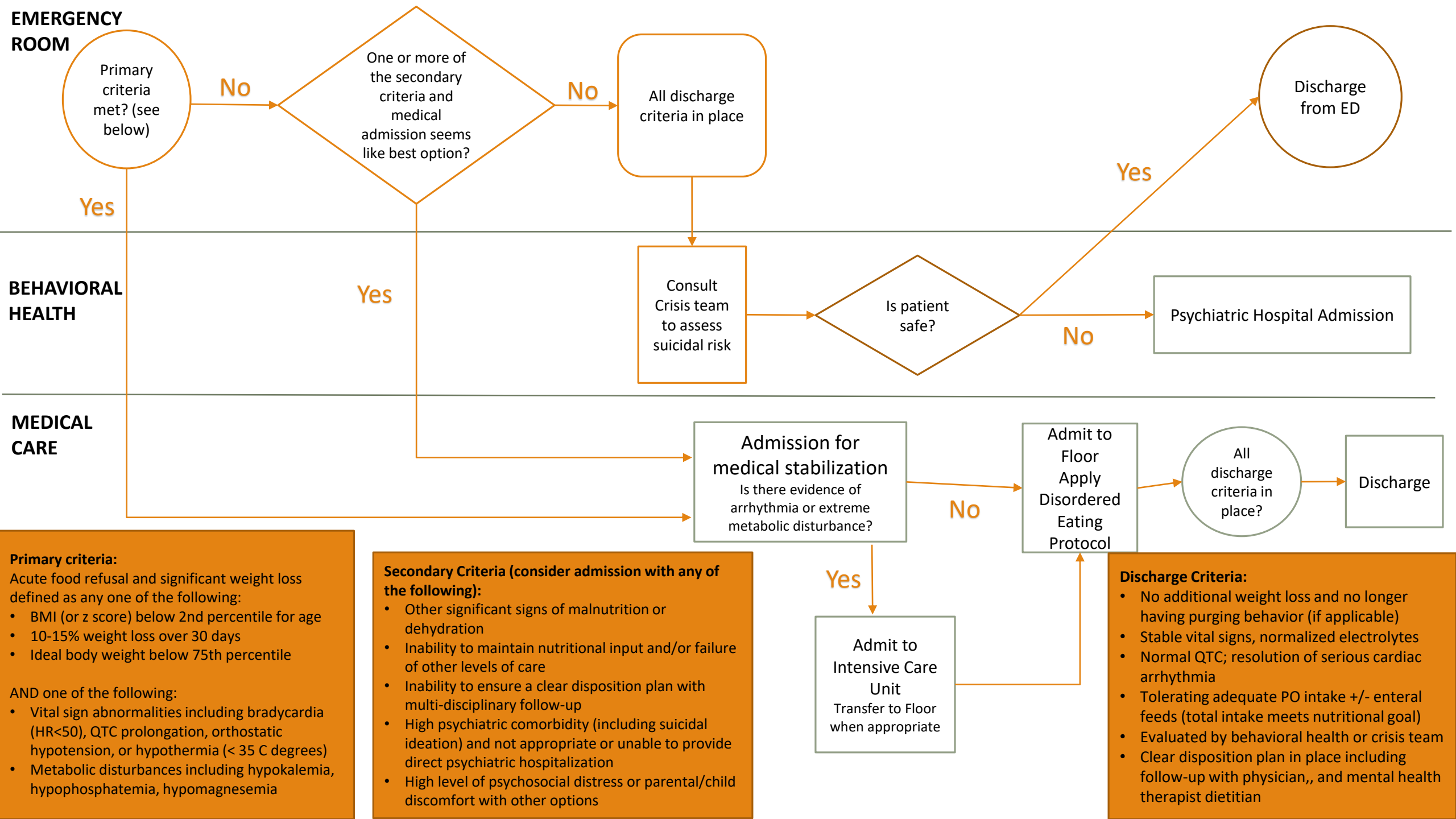
EMERGENCY ROOM
Primary criteria met? (see below)
No
One or more of the secondary criteria and medical admission seems like best option?
No
All discharge criteria in place
Discharge from ED
Yes
Yes
BEHAVIORAL HEALTH
Yes
Consult Crisis team to assess suicidal risk
Is patient safe?
No
Psychiatric Hospital Admission
MEDICAL CARE
Admission for medical stabilization
Is there evidence of arrhythmia or extreme metabolic disturbance?
No
Admit to Floor Apply Disordered Eating Protocol
All discharge criteria in place?
Discharge
Yes
Admit to Intensive Care Unit
Transfer to Floor when appropriate
Primary criteria:
Acute food refusal and significant weight loss defined as any one of the following:
BMI (or z score) below 2nd percentile for age
10-15% weight loss over 30 days
Ideal body weight below 75th percentile
AND one of the following:
Vital sign abnormalities including bradycardia (HR<50), QTC prolongation, orthostatic hypotension, or hypothermia (< 35 C degrees)
Metabolic disturbances including hypokalemia, hypophosphatemia, hypomagnesemia
Secondary Criteria (consider admission with any of the following):
Other significant signs of malnutrition or dehydration
Inability to maintain nutritional input and/or failure of other levels of care
Inability to ensure a clear disposition plan with multi-disciplinary follow-up
High psychiatric comorbidity (including suicidal ideation) and not appropriate or unable to provide direct psychiatric hospitalization
High level of psychosocial distress or parental/child discomfort with other options
Discharge Criteria:
No additional weight loss and no longer having purging behavior (if applicable)
Stable vital signs, normalized electrolytes
Normal QTC; resolution of serious cardiac arrhythmia
Tolerating adequate PO intake +/- enteral feeds (total intake meets nutritional goal)
Evaluated by behavioral health or crisis team
Clear disposition plan in place including follow-up with physician,, and mental health therapist dietitian

Hospital Admission Flow

Admit

- Orders per powerchart (PED Malnutrition/Disordered Eating), including placing patient on specific disordered eating menu, and on stage 1
- Ensure labs, ECG, etc. were drawn in the ED
- Order daily electrolytes
- Consult behavioral health and dieititians. Also consult education
- Consider additional labs if indicated
- Consider GI or additional consults if further diagnostic work-up is needed. Consult available therapy services (child life, art therapy, music therapy)
- Explain importance of food as medicine and the feeding plan
- Explain stages (provide family handout if not already given)

Daily Work

- Monitor for refeeding - are labs still needed?
- Round with dietitian, behavioral health, nurse to assess
  - 1) ongoing meal plan - adjust calories per dietitian
  - 2) decide on NG or not
  - 3) determine stage movement

- Ongoing meal plan – how many meals / snacks were eaten (10 total), calorie counts? Adjust calories
- Decide if NG is needed for overnight feeds
  - (If PO intake is extremely limited in 24 hours, consider NG placement)
  - (If PO intake is <80% of calculated needs in 48 hours (less than 4 out of 6 meals eaten), consider NG placement)

- Determine stage movement (think of as indicators as health). Decision to move to next stage, based on 3 things:
  - 100% compliant with intake for 48 hours (eating 10/10 meals and snacks … can still happen even if NG overnight)
  - Weight stabilizing (typically this means no significant weight loss)
  - Electrolytes stabilizing (by movement to stage 3, labs should be completely normal, by stage 2 – “mostly normal”)

- Determination of stage will be made during am morning rounds with primary team, BH, and dietitian – if all goes well would be 2 days on each stage (make plans for weekend on Friday)

Key Documentation Points

- Include medical status and complications of the malnutrition that is requiring hospitalization

- Why can’t the patient be treated at a lower level of care?

- Document complications - fever, edema/too rapid weight gain, refeeding syndrome

- Day 3 (ish) of admission is somewhat critical.
  - If not making improvements need to be able to explain why and articulate how they can get better

Discharge

Discharge Criteria:

- No additional weight loss and no longer having purging behavior (if applicable)
- Stable vital signs, balanced electrolytes, normal QTC
- Resolution of serious cardiac arrhythmia
- Tolerating adequate PO intake +/- enteral feeds (total intake meets nutritional goal)
- Evaluated by behavioral health or crisis team
- Clear disposition plan in place including follow-up with physician, dietitian, and mental health therapist

- Ensure that discharge criteria are met
- Ensure follow-up plan is in place with physician (adolescent medicine or PCP), dietitian (instructions), and behavioral health (typically outpatient mental health therapist specializing in eating disorders).

Behavioral Health: Overarching Principles

- Inadequate oral intake and malnutrition are putting the child at considerable health risk. This is a medical and behavioral challenge.
- This is a transdiagnostic intervention to begin to restore health and normalize eating behavior
  - Not just for anorexia. Youngsters with ARFID, other eating disorders, conditioned aversion, etc. will be placed on protocol. For patients with somatic symptom disorder, some medical conditions, and functional concerns, protocol may need to be modified. *We continue to create a context to maximize the likelihood that the patient will be able to maintain their health through oral means.*
  - **FOOD IS MEDICINE**
  - This is a collaborative, cooperative, compassionate endeavor to support the child in engaging in those behaviors necessary for health. Approach much as we would a child in DKA. Need restoration, education, and good follow up plan.
  - This is a chronic health problem that will require intensive treatment and follow up

Behavioral Health Team Roles

- Psychosocial assessment and diagnosis
- Meet with team at morning huddle to decide on appropriate stage
- Communicate with family about protocol and daily expectations
- Provide family members with resources and educational materials
- Meet daily with patient for psychoeducation, motivational interviewing, and psychotherapy
- Develop a discharge plan in conjunction with other team members
  - If a child is not discharging to an inpatient or eating disorder program, most outpatient plans include weekly weigh-ins and health check with PCP, twice weekly meetings with a psychologist, and weekly meetings with a dietitian
- Resolve concerns, conflicts, and behavior problems while in the hospital

Stages of Stabilization

- Philosophy:

1. emphasize the seriousness of malnutrition,
2. protect against refeeding (extremely rare) and begin to restore physiological functioning,
3. initiate nutritional rehabilitation and weight restoration, and
4. set expectations for oral intake, increase internal motivation, and establish behavioral skills necessary to maintain health. Teach skills to eat appropriately at home.

We are monitoring the child and family's ability to adequately meet the child's needs and identifying potential barriers in the family system that might undermine child's health.

We work to remove as many barriers to successful eating as possible.

Stage 1 – Education, Orientation, Restoration

Clothing:	In hospital gown
Activity:	Bed rest (may walk to chair for meals or bathroom only) Two short walks up to 10 minutes inside the room assisted by hospital personnel. No shower
Monitoring:	1:1 monitoring for safety, including line of sight in bathroom
Meals:	Parents are asked to leave the room. Meals are assisted by hospital personnel.
Visitors:	Visitors to include immediate family or clergy only (two at time between 6:30-9 PM)

Stage 2 – Early Stabilization and Initiation of Nutritional Rehabilitation

Clothing:	In hospital gown
Activity:	Modified bed rest May sit in chair (up to 30 minutes) three times/day Three 10-min walks outside of the room, escorted by hospital personnel One 10-min shower, monitored by hospital personnel
Monitoring:	Every 15 min safety checks
Meals:	Parents can stay in the room for observation. Meals are assisted by hospital personnel.
	No outside food in the room at any time
Visitors:	Visitors include immediate family or clergy only (2 at time between 6:30-9 PM)

Stage 3 – Preparation for discharge and home simulation

Clothing:	May wear own clothes
Activity:	May walk freely around room, using couch and/or chair as desired Three 15-min walks outside of the room, escorted by hospital personnel or family One 10-min shower, unattended
Monitoring:	Discontinue 1:1 monitoring and/or every 15 min safety checks
Meals:	Encourage family meals. Family may bring their own meals to eat with patient during regularly scheduled mealtime. Patient still required to order from PCH menu.
Visitors:	Visitors beyond immediate family are welcome (two at time between 6:30-9PM)

Dietitian Role

- Initial assessment
  - Determine calorie goal
  - Initial education/visit
  - Refeeding protocol
  - Document malnutrition
- Ongoing adjustment of oral and/or tube feed calorie provision
  - Weight gain trends
    - Goal 130-200 grams/day
  - Calorie count results
- Follow up assessment every 7 days
  - Daily Check Ins
    - Calorie counts
    - Weight checks
    - Assist with monitoring labs for refeeding
    - Ongoing assessment of need for NG with team
    - Available for help with menu and patient or parent questions by request
  - On discharge
    - If discharging to outpatient follow up, provide calorie appropriate “exchange” menu, as well as tube feed goals if applicable
      - Refer to outpatient dietitian
    - If discharging to inpatient facility, will defer to dietitian at that facility

Nutrition Protocol

- Calorie Count – ongoing
- Refeeding Protocol
  - Thiamine 100mg/day x 3-7 days
  - Baseline labs: Potassium, Magnesium, Phosphorus, Glucose
  - Monitor electrolytes q6-12hr and replete as needed
- Initiate 1800kcal oral meal plan until dietitian able to determine needs
- Patients will choose from a set menu with limited options
- Allow patient to choose meals for the following day(s) in AM or at each meal

Nutrition Protocol

- 3 meals and 2-3 snacks, dependent on calorie level
  - 25 minutes for meals
  - 10 minutes for snacks
- Menu calorie levels: 1800, 2100, 2400, 2700, 3000
- Meals and snacks are either “complete” or “incomplete”
- Only honor documented food allergies
- Try to avoid replacing meals/snacks with oral supplements (i.e. Boost), however this can be an option if needed

Nutrition Protocol

- If completing <50% meals/snacks during the first 24 hours, place NG tube
- If completing <80% meals/snacks after the first 48 hours, place NG tube
- If NG is placed, feeds will run overnight, providing 50% of needs initially and adjusted per oral intake and weight gain trends
  - Fibersource HN (1.2 kcal/mL)
- NG may be removed after 2 days of no use

Nursing Perspectives

Previously

- No clear rules or guidelines → confusion and inconsistency
- General team frustration
- Limited resources and evidence

Now

- Clear expectations for providing care
- Easily accessible resources
- Increased teamwork and collaboration in care of individual patients
- Nurses empowered to care for individual patients using an evidence-based practice approach

Nursing Team Roles

- Nutritional support
  - Provide daily menu and support pre-ordering
  - Provide oral supplements if desired to “complete” a meal
- Documentation
  - Meal is “complete” if only “sips and crumbs” are left
  - Continue collecting receipts for calorie counts
- Daily rounds with dietitian, behavioral health, and nursing
- Help create a daily schedule
  - Including times for child life, art therapy, music therapy, education, behavior health specialist
- Communicate with family about protocol and daily expectations
- Support patient safety attendant

Patient Safety Attendant Team Role

- Two main roles: support meal completion and model normalized eating patterns
- Pre-eating set-up
- During meal time, converse and support
- Post-meal is good time for distraction
- Provide monitoring on walks, showers, etc, per stage progressions

Sample schedule

800	Wake up, void, brush teeth and hair, morning weigh in
900-925	Breakfast in chair at a table; Return to bed once tray is removed
930	Meet with Child Life or complete in bed activities (art, reading, games)
1000	Meet with dietician for education and next day meal planning
1030	Journaling for 15 minutes; Mindfulness for 15 minutes
1200-1225	Lunch in chair at a table; Return to bed once tray is removed
100-145	Therapy with Behavioral Health
200	Art or Music Therapy
300-315	Afternoon snack, in chair at a table
315-330	BHS for skill teaching
330-400	Journaling for 15 minutes; Mindfulness for 15 minutes
400	Wheelchair walk out of room
430-600	Relaxation – in bed activities or tv
600-625	Dinner in chair at a table; May remain in chair for 30 minutes
700	Family time; Wheelchair walk; In bed activities or tv
900-915	Evening snack or Ensure
1000	Lights out

*Level 1 – In hospital gown, on bed rest (may walk to chair or bathroom only), bathroom locked or water off, 1:1 monitoring for safety, visitors to include family only

Integrated Care for Children with Malnutrition and Disturbed Eating - Letter

1. Introduction to the document
2. Daily routine
   - Morning
   - Meals
   - Daily activities
     - Stage 1
     - Stage 2
     - Stage 3
   - Other processes and policies
3. Going Home

Discharge Plan

Appointments with

1. PCP or Adolescent Medicine
   - Dr. Nikki Mihalopoulos of Adolescent Medicine has expanded availability in her clinic.

     -Inpatient team to *message* *Primary Children's UofU Yellow Scheduling* in i-centra for appointment before discharge. Patient should have appointment within 10 days

     OR

     If PCP is very comfortable, make appointment before discharge (medical team or parent to do).

2. Dietitian
   - Regional experts. Inpatient Dietitians will give parents contact information.

     Parent to do: make appointment before discharge

3. Behavioral Health
   - Inpatient BH Team will give parents names of therapists that work with insurance.
     Parent to do: make appointment before discharge

Documents

SUPPORTING DOCUMENTS:

Disordered Eating Dietician PCH Guideline

Disordered Eating LIP PCH Guideline

Disordered Eating Nursing PCH Guideline

Disordered Eating Patient Safety Attendant PCH Guideline

Disordered Eating Stage System Appendix

Integrated Care for Children with Disordered Eating Information for Caregivers

Patient Assessment Suicide Risk Policy

Patient Safety Attendant Procedure

Recommended Refeeding Guidelines Pediatric Table

Eating Disorder CPM Behavior Health Clinical Program

Intermountain® Primary Children's Hospital

Disordered Eating PCH Procedure

PURPOSE:

To describe the care of hospitalized patients with disordered eating.

SCOPE:

Primary Children's Hospital

SUPPORTIVE DATA:

Indications: For patients with disordered eating and subsequent malnutrition requiring inpatient monitoring.

Contraindications: None

Definitions:

Disordered eating: Disordered eating is a disturbed and unhealthy eating pattern that can include restrictive dieting, compulsive eating or skipping meals.

LOS: Length of stay

PSA: Patient safety attendant

Stage System: Refer to Disordered Eating Stage System Appendix

Stage 1: in hospital gown, on bed rest (may walk to chair or bathroom only), bathroom locked, and water turned off, 1:1 monitoring for safety, visitors to include immediate family or clergy only

Stage 2: in hospital gown, may sit in chair 3 times per day, may take three 10 minute walks, bathroom remains locked and water turned off, nursing staff or behavioral health specialist escort to shower and bathroom, discontinue 1:1 monitoring, but have door remain open for every 15 min safety checks, visitors to include immediate family or clergy only

Stage 3: may wear own clothes, may walk freely around room and have three 10-minute escorted walks, may shower unattended, continue to keep bathroom locked and water turned off, may discontinue every 15 min checks and may have non-immediate family visitors

Environmental Assessment and Precautions:

- assure doors operate properly, no items blocking access / exit,
- scan room for presence of items potentially harmful to self and others, and mitigate risk
- lock and secure windows
- lock bathroom and turn off water in room
- remove any cleaning solutions / chemicals / cleaning wipes
- secure all patient drains / tubes

Questions??