Childhood and Adolescent Obesity Evaluation and Treatment

Marnie Walston, MD

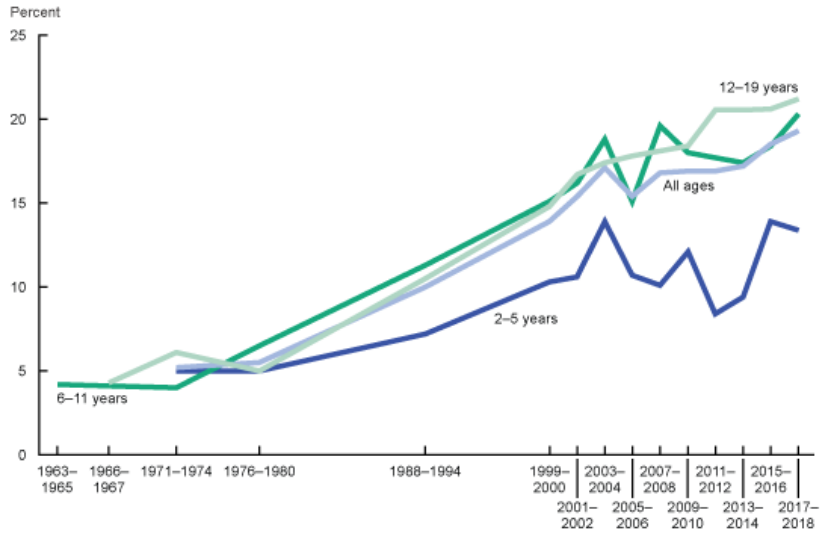
Akron Children's Hospital

Objectives

- Understand the role of the primary care provider in the evaluation and treatment of pediatric obesity.
- Discuss evidence-based treatments for pediatric obesity including intensive lifestyle modification, pharmacotherapy and bariatric surgery.
- Describe the role of the tertiary care obesity clinic in the treatment of pediatric obesity and know when to refer.

Childhood Obesity Facts

- 1 in 5 U.S. children and adolescents have obesity
- 6.1% of U.S. children have severe obesity
- Obesity affects some groups more than others (adolescents, Hispanic and non-Hispanic Black children, children in families with lower incomes)



Childhood Obesity Facts | Obesity | CDC


12 CAUSES OF OBESITY
Education System & Parenting
Finances & Funding
Cognition & Addiction
Genetics & Epigenetics
Workplace & Business Culture
Sleep, Stress & Immunity
Nutrition
Healthcare & policy delivery
Exercise & activity levels
Hormones & Metabolism
Community & Lifestyle Planning
Food Policy & Production
INDIVIDUAL FACTORS
ENVIRONMENTAL FACTORS
EASO
European Association for the Study of Obesity
www.easo.org/12-causes-of-obesity

Communication About Weight

Case: 17-year-old girl with obesity, asthma and depression presents for an annual checkup

I'm tired all the time, and my asthma has gotten a lot worse this year. I stopped playing basketball because I couldn't keep up with the other girls on my team and school is very stressful right now. I just wish I had more energy.

How would you start a conversation about weight with this patient?

Why is it hard to talk about weight?

Providers:

- Fear of offending patients
- Insufficient knowledge of treatments and referral pathways
- Sense of futility
  - Does lifestyle modification even work?
  - Do I have time to address this is a meaningful way?

Patients and Families:

- Concerns about self-esteem and body image
- Concerns about eating disorders
- Feeling blamed for their condition
- Feeling guilt, shame and humiliation

Image credit: ECPO Media

Auckburally S, Davies E, Logue J. The Use of Effective Language and Communication in the Management of Obesity: the Challenge for Healthcare Professionals. *Curr Obes Rep*. 2021;10(3):274-281. doi:10.1007/s13679-021-00441-1

Starting the Conversation

- Ask permission to discuss weight
  - *During annual checkups I like to check in on weight, diet, and exercise. Would it be ok to talk about that for a few minutes?*
- Share fact-based observations
  - *I see in your chart that you've had about 20 pounds of weight gain over the past year, and that your asthma has gotten worse over that time.*
  - *Your BMI has gone up a few points since last year and that gets my attention because of your family history of diabetes*

Image credit: ECPO Media

Starting the Conversation

- Ask open ended questions with nonjudgmental and curious tone
  - *What things do you think are contributing to your weight gain?*
  - *What have you done to try to lose weight in the past?*
  - *What has been helpful? Has anything worked, even for a short time?*
- Balance empathy and hope
  - *Avoiding weight gain is hard with the current food environment.*
  - *Your asthma must make it difficult to do aerobic exercise.*
  - *Weight loss isn't easy, but treatment can be effective, and we have tools that can help.*

Avoid Stigmatizing Language

- Use person-first language
  - "Patient with obesity", not "obese patient"
- Use patient preferred terminology
  - Avoid obese, obesity, morbidly obese, fat, fatness, large, overweight
  - Patients prefer weight, BMI, weight problem, gaining too much weight, too much weight for his/her health

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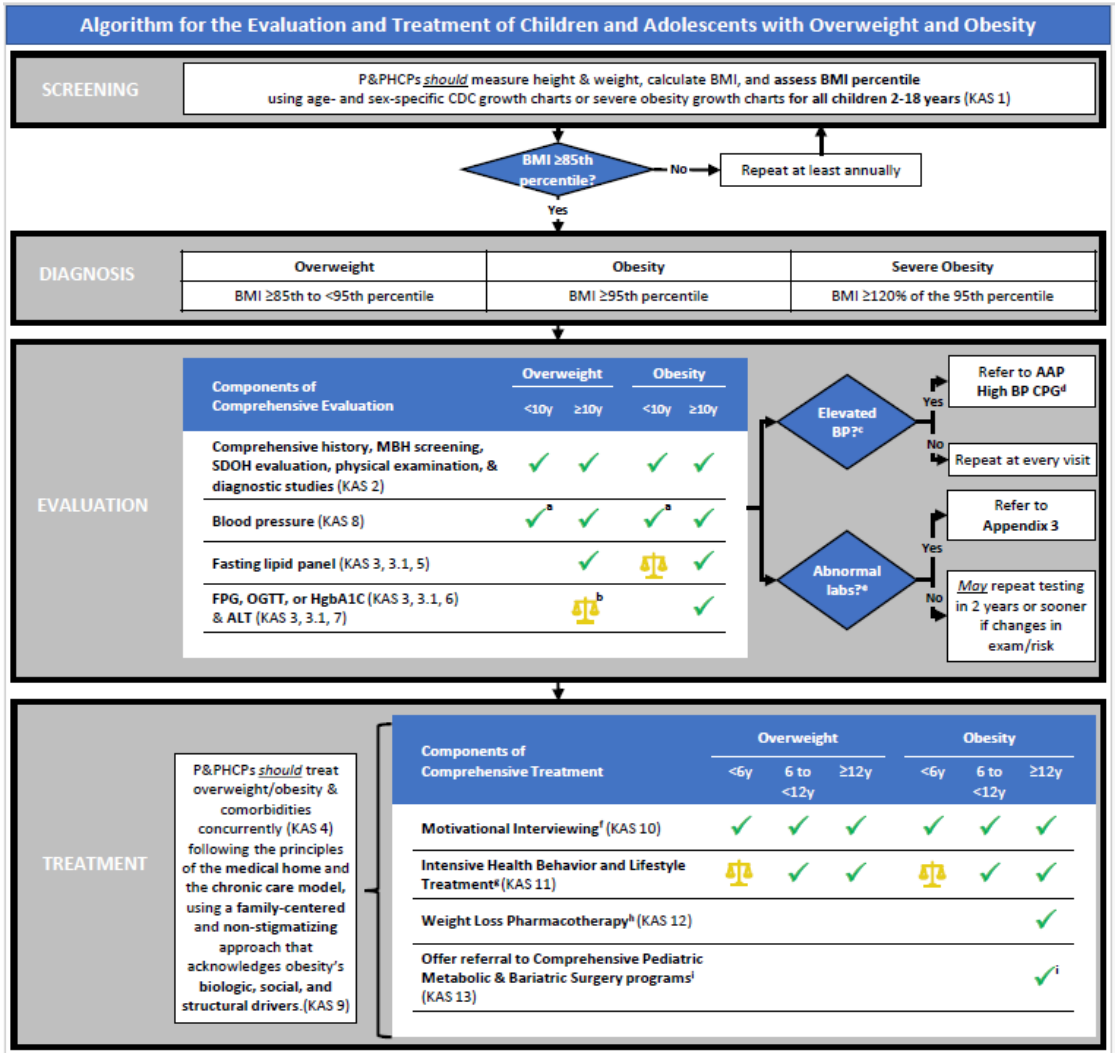
Collaborative Goal Setting

- Partner with family to set realistic, achievable and meaningful goals
- Emphasize that modest weight loss can produce meaningful health benefits
- Educate that improving diet quality and increasing physical activity can positively influence health independent of weight

Image credit: ECPO Media



[Clinical Practice Guideline for the Evaluation and Treatment of Children and Adolescents With Obesity]

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Clinical Practice Guideline for the Evaluation and Treatment of Children and Adolescents With Obesity

Intensive Health Behavior and Lifestyle Treatment

Behavioral Strategies

Reduction of sugar sweetened beverages

Choose My Plate (nutrient balance and portions)

60 minutes daily of moderate to vigorous physical activity

Reduction in sedentary behavior

Appropriate amount of sleep for age

Weight Loss Pharmacotherapy

- Always as adjunct to health behavior and lifestyle treatment

- CPG supports use in patients 12 and older with consideration in younger children depending on risk/benefit assessment

FDA-approved medications for treating pediatric obesity

- Semaglutide (Wegovy)
- Liraglutide (Saxenda)

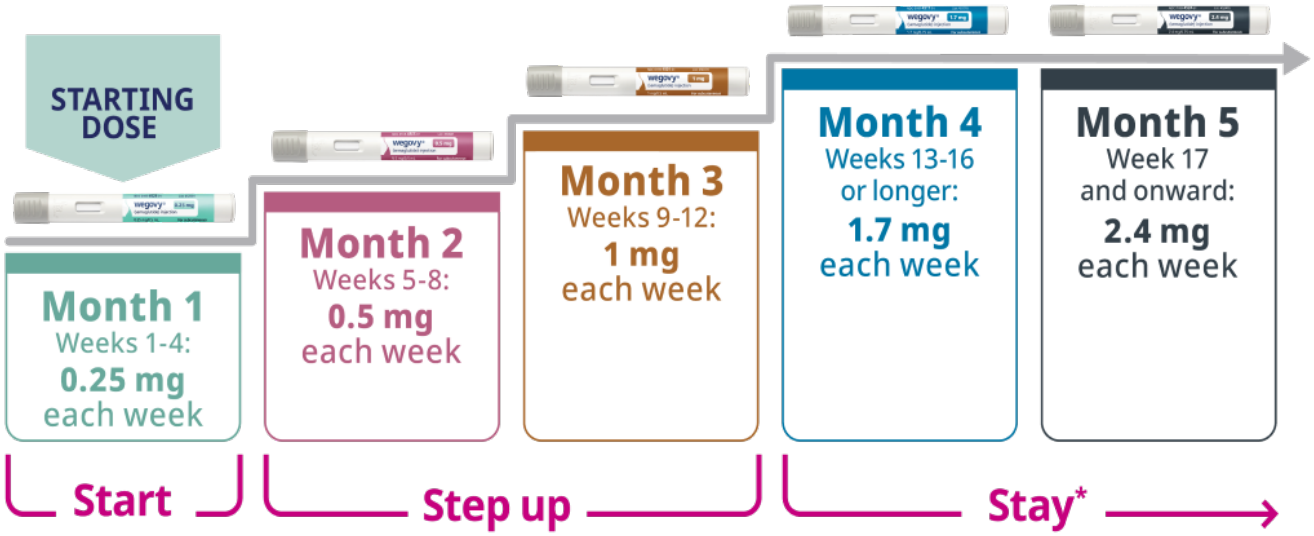
- Phentermine-topiramate (Qsymia)
- Phentermine (Adipex-P, Lomaira)
- Orlistat (Xenical, Alli)

Off-label medications for treating pediatric obesity

- Topiramate (Topamax)
- Metformin (Glucophage)

Semaglutide (Wegovy)

- Weekly injections with single use pen, preset dose
- Contraindicated with personal or family history of medullary thyroid cancer or MEN-2, pregnancy



Semaglutide (Wegovy)

- Common side effects: nausea, vomiting, diarrhea, and injection site reactions
- Less common: abdominal pain, constipation, headache, dizziness, fatigue
- Risk of pancreatitis higher in adolescents
- Hypoglycemia is a potential side effect, however routine monitoring of BG is not recommended

Semaglutide (Wegovy)

In medical studies, people who stopped taking Wegovy® generally regained weight.

Semaglutide (Wegovy)

- Patients can check cost and coverage on website www.Wegovy.com

- Ohio Medicaid insurances **are covering** for patients 12-21 years old with obesity and who have documented efforts at dietary modification and increased physical activity

Phentermine-Topiramate (Qsymia)

- Administered orally once per day
- Contraindicated with pregnancy, substance abuse, CVD, hyperthyroidism, glaucoma, MAOI use
- Caution with renal impairment, elevated blood pressure, suicidality, poor cognitive function/academic challenges

Phentermine-Topiramate (Qsymia)

- Common side effects: paresthesia, dizziness, dysgeusia, insomnia, constipation, dry mouth
- Most serious: teratogenic- cleft lip/palate in fetus
- Risk of metabolic acidosis, monitor electrolytes

Phentermine-Topiramate (Qsymia)

Average Results At 56 WEEKS	Diet and Exercise Alone Placebo	Diet and Exercise with Qsymia 7.5/46 mg	Diet and Exercise with Qsymia 15/92 mg
Number of patients (n)	30	37	72
Weight Lost (Pounds)	+14.6	-12.8	-24.4
Waist Circumference Reduction (Inches)	+0.05	-2.7	-4.0

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Phentermine-Topiramate (Qsymia)

- Ohio Medicaid insurances **are covering** for patients 12-21 years old with obesity and who have documented efforts at dietary modification and increased physical activity
- Can use separate phentermine and topiramate prescriptions- less expensive
- Qsymia Engage- $98/month out of pocket without insurance coverage

Bariatric Surgery

- Always as adjunct to health behavior and lifestyle therapy

- CPG supports **consideration** for patients 12 years old with severe obesity, BMI >=120% of the 95%ile or BMI >=35 kg/m2

Adolescent Bariatric Surgery
2018 Guidelines – AAP, ASMBS, APSA

Indications

- BMI ≥35 kg/m^2 or 120% of 95th percentile
  - With clinically significant comorbid conditions such as obstructive sleep apnea (AHI >5), T2D, IIH, NASH, Blount's disease, SCFE, GERD or hypertension
- BMI ≥40 kg/m^2 or 140% of 95th percentile (whichever is lower)

Additional Requirement

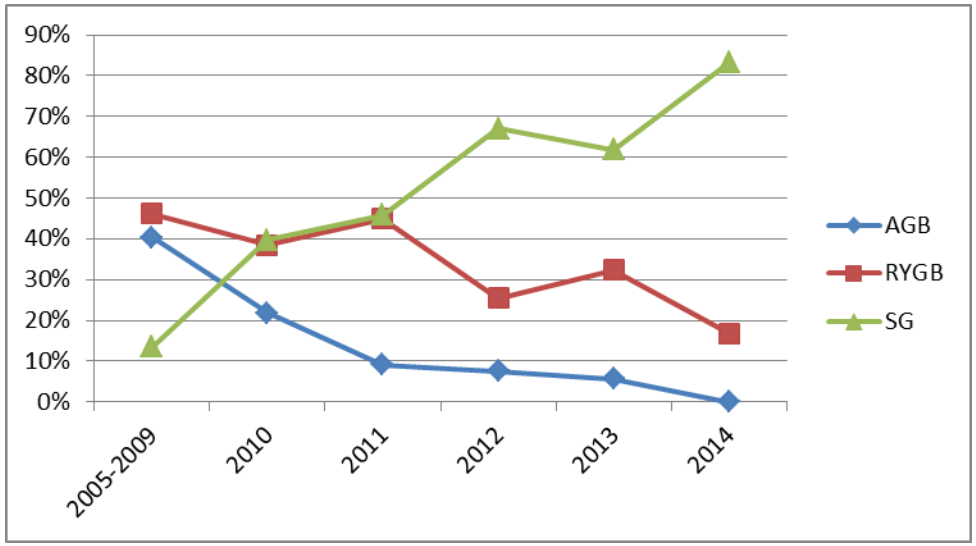
A multidisciplinary team must also consider whether the patient and family have the ***ability and motivation*** to adhere to recommended treatments pre- and postoperatively, including consistent use of micronutrient supplements.

Adolescent Bariatric Surgery

Contraindications

- A medically correctable cause of obesity
- An ongoing substance abuse problem (within the preceding year)
- A medical, psychiatric, psychosocial, or cognitive condition that prevents adherence to postoperative dietary and medication regimens.
- Current or planned pregnancy within 12 to 18 months of the procedure

Procedure Preference

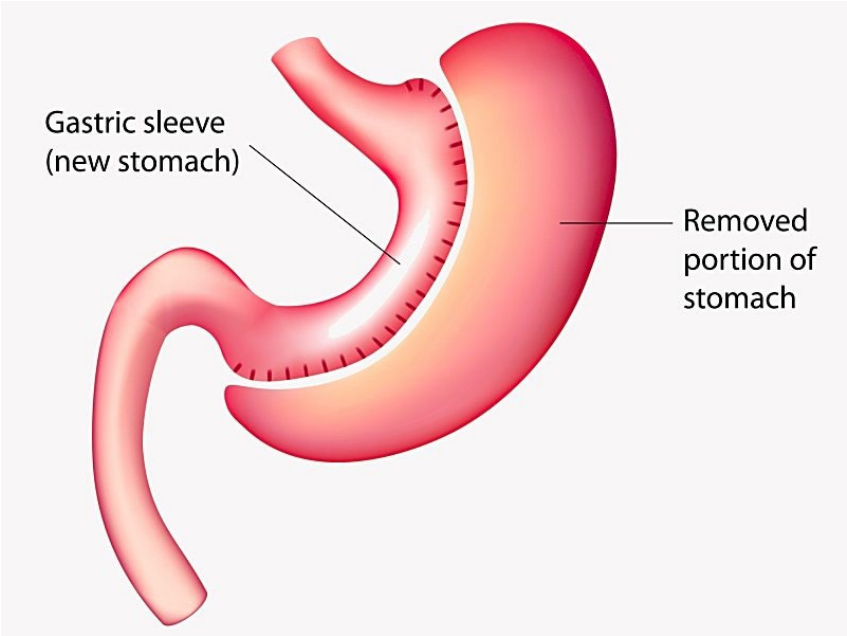


N = 242

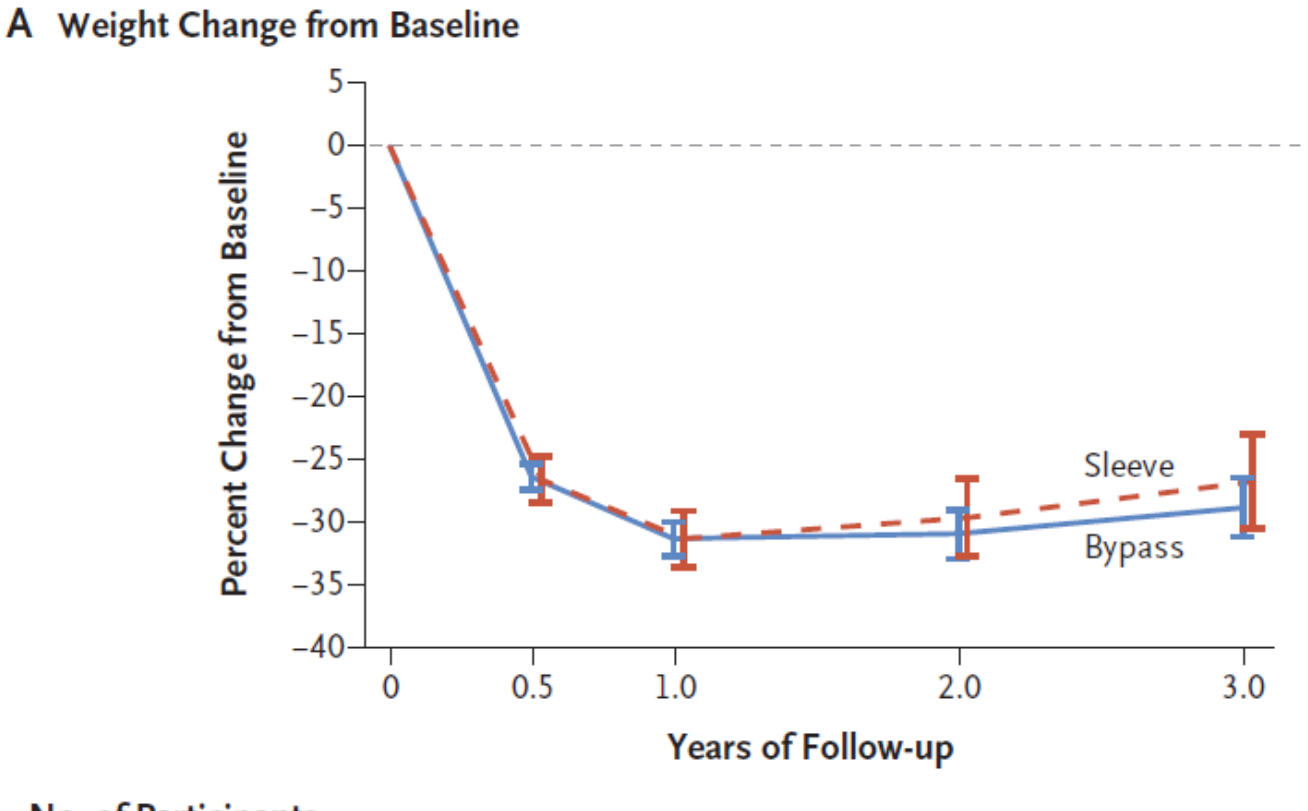
Inge etal. Comparative effectiveness of bariatric procedures among adolescents:
the PCORnet bariatric study. Surg Obes Relat Dis. 2018 Sep;14(9):1374-1386.

Bariatric Surgery

- Laparoscopic Sleeve Gastrectomy
  - Restrictive
  - Hormonal changes
  - NOT malabsorptive



Post Op Weight Loss



Sleeve: -26%
Bypass: -28%
p=NS

Teen Longitudinal Assessment of Bariatric Surgery
www.Teen-LABS.org

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Disease Remission

- Reversal of:
  - Type 2 diabetes in 95%
  - Abnormal kidney function in 86%
  - Prediabetes in 76%
  - Elevated blood pressure in 74%
  - High cholesterol in 66%.

- Weight-related quality of life also improved significantly.

Healthy Active Living
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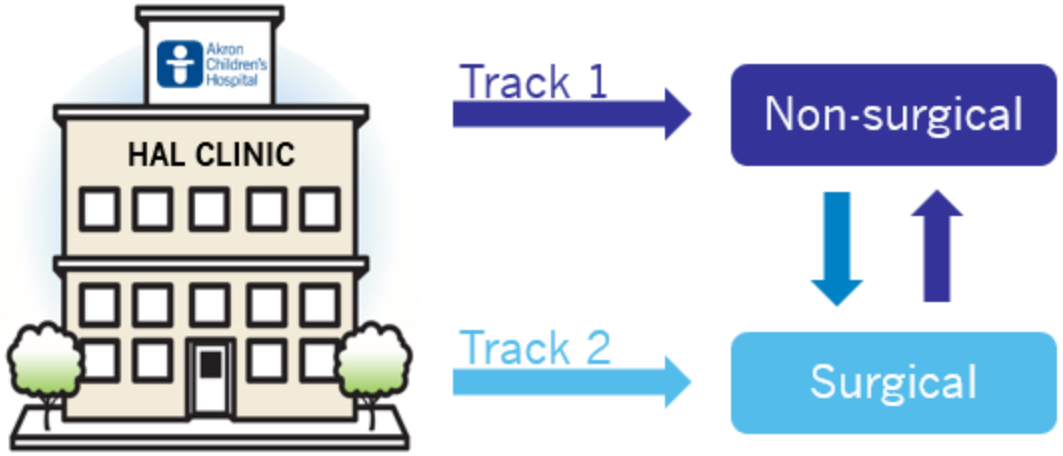

Marnie Walston, MD
mwalston@akronchildrens.org

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