

Staying in the Solution: How Do We Implement Evidence in Obesity Care?

Provided by
HME
Healthcare Medical Education

Supported by an educational grant from Lilly



Pre-test

- Please be sure to scan the QR code at your table to complete the activity pre-test before we begin.



Faculty

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Education

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Learning Objectives

- **Apply** the most recent evidence-based guidelines and emerging data for the diagnosis and management of obesity as a chronic, treatable disease
- **Review** recent efficacy and safety outcomes of clinical trials of available and emerging anti-obesity medications (AOMs) and the implications for real-world practice
- **Employ** holistic care plans for patients with obesity that incorporate education and principles of shared decision-making (SDM) while avoiding the perception of stigma or bias

Faculty Disclosures

Dr. Vega is a consultant for Boehringer Ingelheim and GlaxoSmithKline.

All of the relevant financial relationships listed for these individuals have been mitigated.

PART 1

**Meeting the Unmet Challenges
in Obesity Care**

Obesity: Scope of the Problem

Obesity Is a Chronic Disease

- Obesity is defined by the World Health Organization (WHO) as *excess abnormal body fat, which may impair health*
- Body mass index (BMI) is a good population measure of body fat and an imperfect measure in individuals

For Europids:

Overweight BMI $>25 \text{ kg/m}^2$
Obesity BMI $>30 \text{ kg/m}^2$
Waist circumference: 35 inches
for women & 40 inches for men

Jensen MD, et al. *Obesity*. 2014;22(S2):S1-S410.

For Asians:

Overweight BMI $>23 \text{ kg/m}^2$
Obesity BMI $>25 \text{ kg/m}^2$
Waist circumference: 31.5 inches
for women & 35 inches for men

WHO/IASO/IOTF, 2000.
(http://www.idi.org.au/obesity_report.htm)

Geographical Disparities in the United States



<https://www.cdc.gov/obesity/data/prevalence-maps.html>

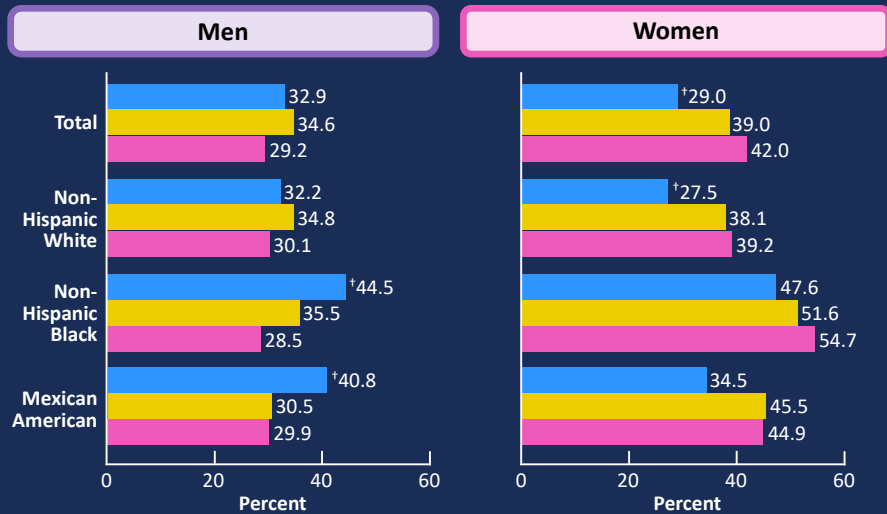
Obesity Rates for Adults in the United States in 2022, By Race/Ethnicity

- Black adults had the highest obesity rates of any race or ethnicity in the United States, followed by American Indians/Alaska Natives, and Hispanics
 - As of that time, approximately 44% of all Black adults had obesity
- Obesity rates for Asian women (14.8%) and men (10.1%) are much lower than the rates for the other racial/ethnic groups

Obesity and Socioeconomic Status Among U.S. Adults

Prevalence of obesity among adults aged 20 years and older, by poverty income ratio, sex, and race and ethnicity: United States 2005-2008

■ PIR ≥ 350%
■ 130% ≤ PIR < 350%
■ PIR < 130%



†Significant trend.

PIR, poverty income ratio. Persons of other race and ethnicity included in total.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey, 2005-2008.

Comorbidities of Obesity

Complications associated with obesity include:

- Type 2 diabetes
- Heart/Cardiovascular Disease
- Cancer
- Arthritis
- Urinary incontinence
- Infertility
- Depression
- Anxiety
- Obstructive sleep apnea
- MASLD

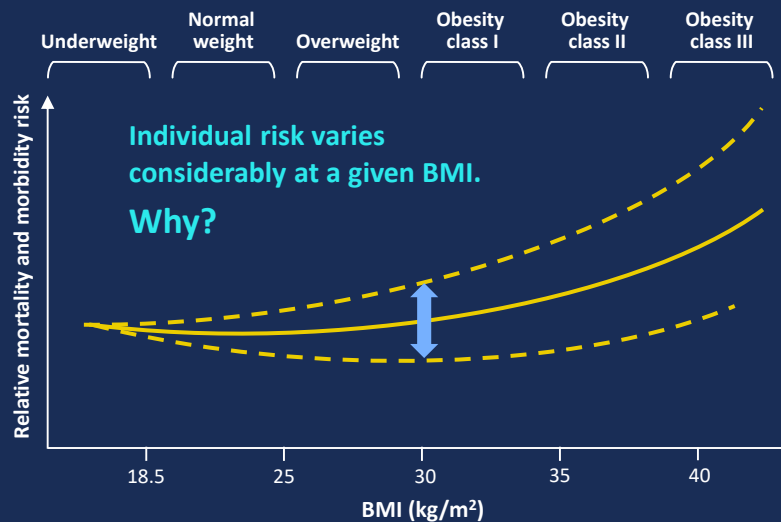


Overweight and obesity are defined as abnormal or excessive fat accumulation that presents a risk to health

Despite this, healthcare systems focus on treating the **complications vs the cause**

Diagnosis/Staging

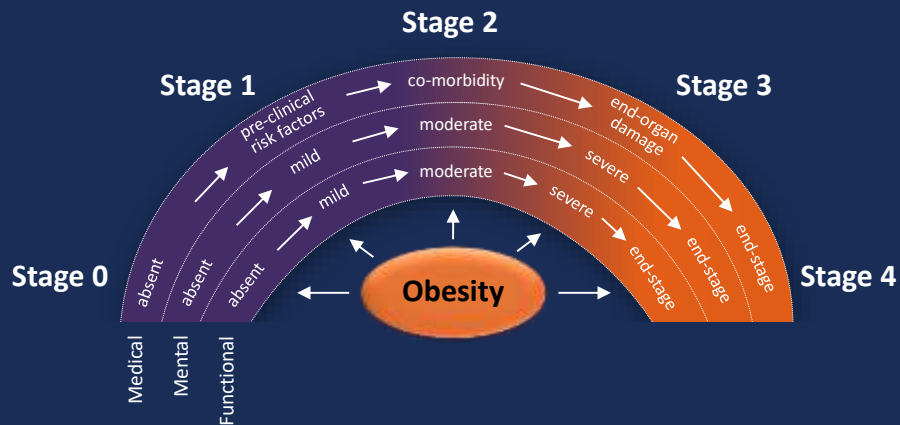
Limitations of the BMI



June 14, 2023

Body mass index (BMI) is easy to measure and inexpensive. But BMI is an imperfect measure because it does not directly assess body fat. Thus, the AMA suggests that it be used in conjunction with other valid measures of risk such as, but not limited to, measurements of visceral fat, body adiposity index, body composition, relative fat mass, waist circumference, and genetic/metabolic factors.

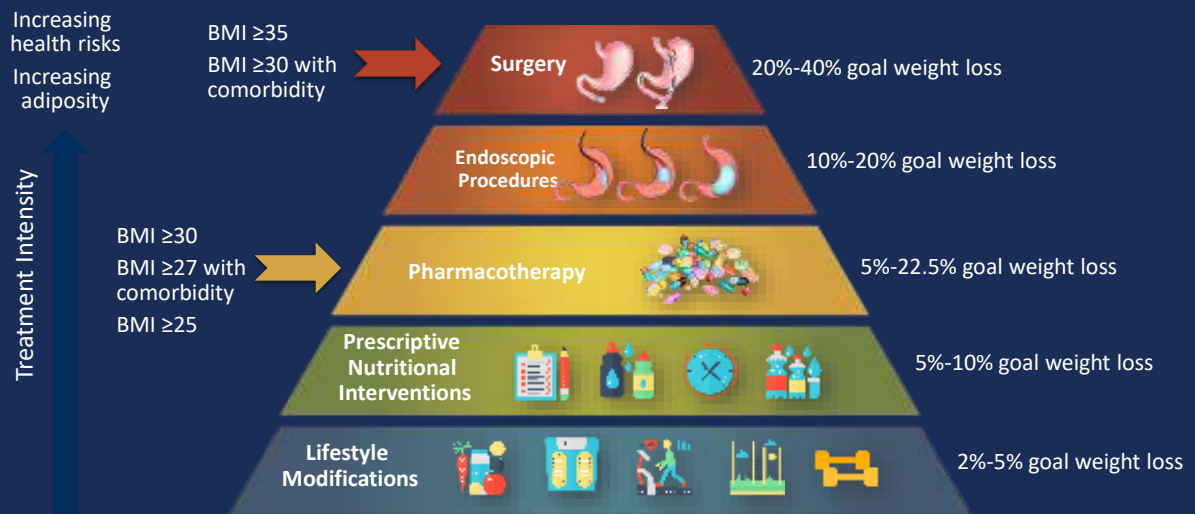
Edmonton Obesity Staging System (EOSS)



The Edmonton Obesity Staging System (EOSS) ranks severity of obesity based on clinical assessment of weight-related health problems, mental health and quality of life.

Treatment Strategies

Obesity Treatment Pyramid



Slide courtesy of Angela Fitch, 2020.

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Anti-Obesity Medications FDA Criteria



- For patients with BMI ≥ 30
- For patients with BMI ≥ 27 or above at least 1 comorbidity (hypertension, dyslipidemia, CHD, type 2 diabetes, sleep apnea)
- In conjunction with lifestyle interventions
- Semaglutide 2.4 mg indicated in people with overweight or obesity at risk for recurrent cardiovascular event

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Medications for Chronic Weight Management

Agent	Mechanism of action	Effect	Approval
Phentermine (US Only)*	<ul style="list-style-type: none"> Sympathomimetic 	Appetite regulation	1959
Orlistat (Xenical, Alli)	<ul style="list-style-type: none"> Pancreatic lipase inhibition 	Reduced fat absorption	1999
Phentermine/ topiramate ER (Qsymia)	<ul style="list-style-type: none"> Sympathomimetic Anticonvulsant (GABA receptor modulation, carbonic anhydrase inhibition, glutamate antagonism) 	Appetite regulation	2012
Naltrexone/bupropion SR (Contrave/Mysimba)	<ul style="list-style-type: none"> Opioid receptor antagonist Dopamine/noradrenaline reuptake inhibitor 	Appetite regulation	2014
Liraglutide (Saxenda)	<ul style="list-style-type: none"> GLP-1 receptor agonist 	Appetite regulation	2014
Semaglutide (Wegovy)	<ul style="list-style-type: none"> GLP-1 receptor agonist 	Appetite regulation	2021
Tirzepatide (Zepbound)	<ul style="list-style-type: none"> GIP/GLP-1 receptor co-agonist 	Appetite regulation	2023
Setmelanotide (Imcivree)	<ul style="list-style-type: none"> Melanocortin-4 receptor agonist 	Appetite suppression	Approved 2020 (rare genetic conditions; deficiency of POMC, PCSK1, or LEPR)
Metreleptin (Myalept)	<ul style="list-style-type: none"> Recombinant human leptin analog 	Management of lipodystrophy	2014 (leptin deficiency only)

* Off-label for chronic weight management.
ER, extended release; GABA, gamma-aminobutyric acid; SR, sustained release

Third-generation Anti-Obesity Medications

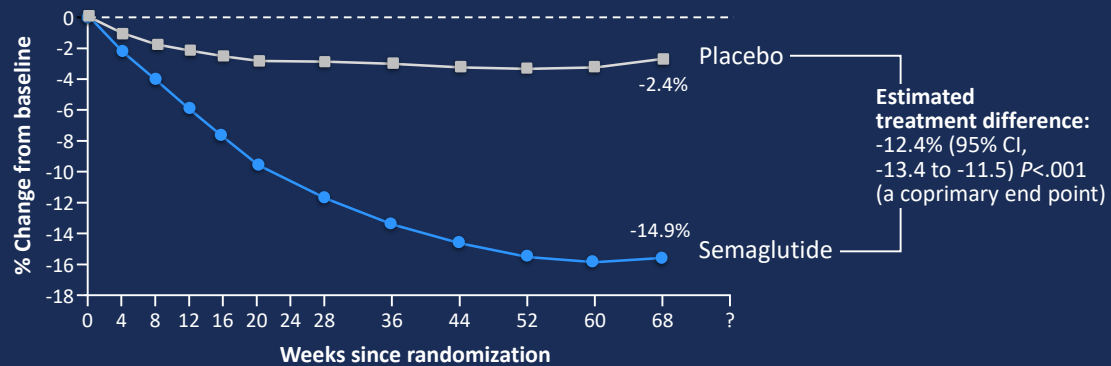
Tirzepatide
(Dual GIP/GLP-1
receptor co-agonist)

Semaglutide
(GLP-1 RA)

Semaglutide 2.4 mg Weekly

GLP-1 Receptor Agonist:

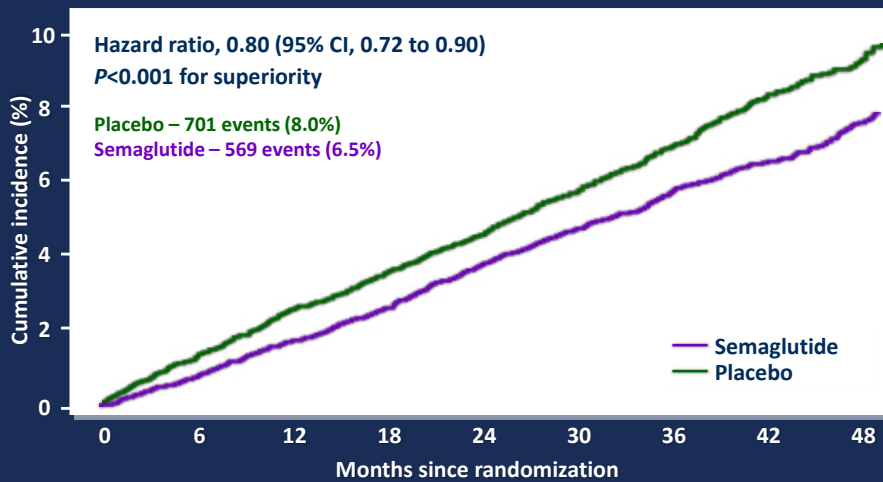
- Common SE: GI – nausea, vomiting, diarrhea, constipation
- Avg. weight loss of 34 lbs = 14.9% weight loss in the total trial population



Wilding JPH, et al. *N Engl J Med.* 2021;18;384(11):989-1002.

SELECT Trial – Cardiovascular Efficacy CV Death, Nonfatal MI, or Nonfatal Stroke

Primary Cardiovascular Composite Endpoint



20%

reduction in
risk of MACE*

Semaglutide 2.4 mg significantly reduced the risk of MACE by 20% compared with placebo in people with obesity and established CVD, without T2D

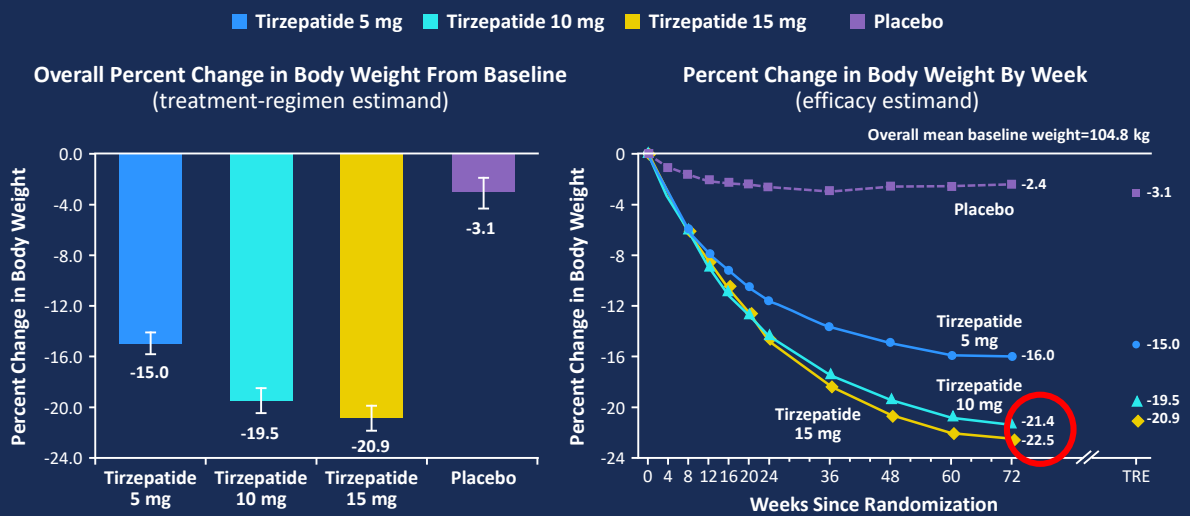
All three components (death from CV causes, non-fatal MI and non-fatal stroke) contributed to MACE risk reduction

Mean follow-up time was 39.8 months

March 2024

- U.S. Food and Drug Administration approved a new indication for use for semaglutide 2.4 mg injection to reduce the risk of cardiovascular death, heart attack and stroke in adults with cardiovascular disease and either obesity or overweight
 - “... (semaglutide) should be used in addition to a reduced calorie diet and increased physical activity”

SURMOUNT-1 (Tirzepatide)

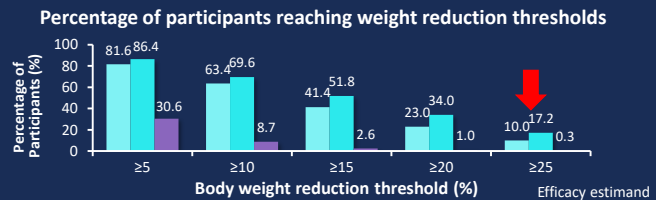
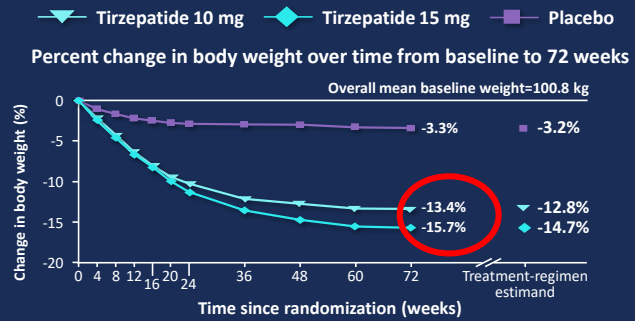


Jastreboff AM, et al. *N Engl J Med.* 2022;387(3):205-216.

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SURMOUNT-2 DATA (Tirzepatide)

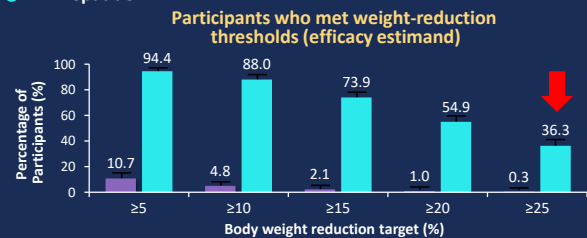
- 938 subjects with OW or obesity WITH diabetes
- 15.7% TBWL
- First time double-digit weight loss has been demonstrated in subjects with obesity and diabetes



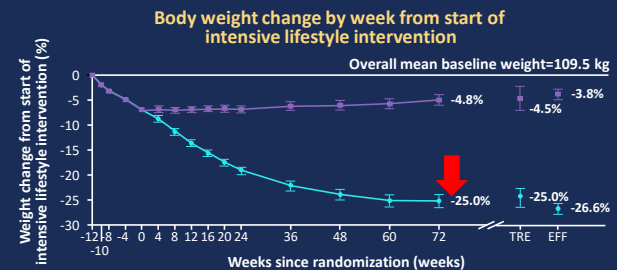
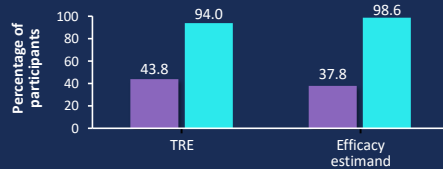
SURMOUNT-3 Data (Tirzepatide)

- 806 subjects with OW or OB and no diabetes started trial, 579 were randomized
- 12-week ILI run which required a 5% weight loss in order to be randomized. 72-week follow-up

■ Placebo ● Tirzepatide MTD



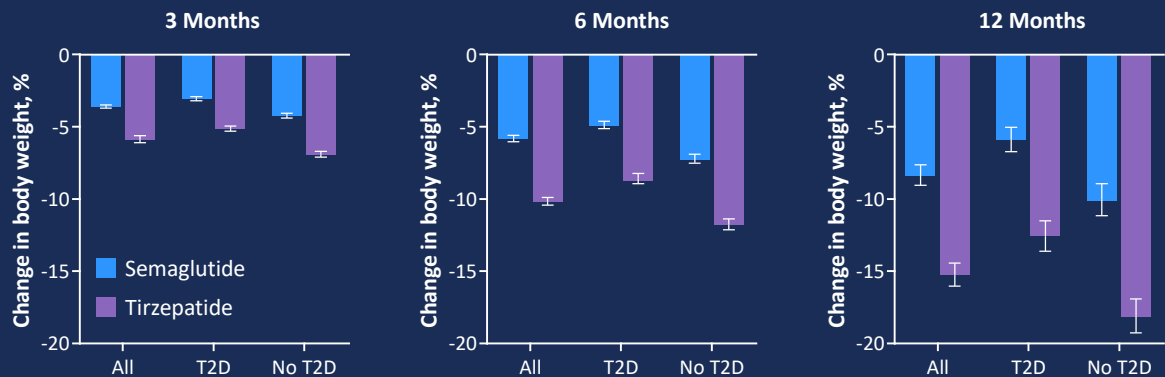
Proportion of participants maintaining ≥80% of body weight lost during the 12-week lead-in period



ILI, intensive lifestyle intervention; MTD, maximum tolerated dose.
Wadden TA, et al. *Nat Med.* 2023;29:2909-2918.

July 2024: Semaglutide vs Tirzepatide for WL In Adults With Overweight/Obesity

Mean Percentage Change in Body Weight at 3, 6, and 12 Months Receiving Treatment for the Overall Population, Those With Type 2 Diabetes (T2D), and Those Without T2D



Bars represent mean changes in body weight from baseline to the time point among the propensity score matched population of patients still receiving treatment. The whiskers represent 95% CIs.

Rodriguez PA, et al. *JAMA Intern Med.* 2024 Jul 8:e242525.

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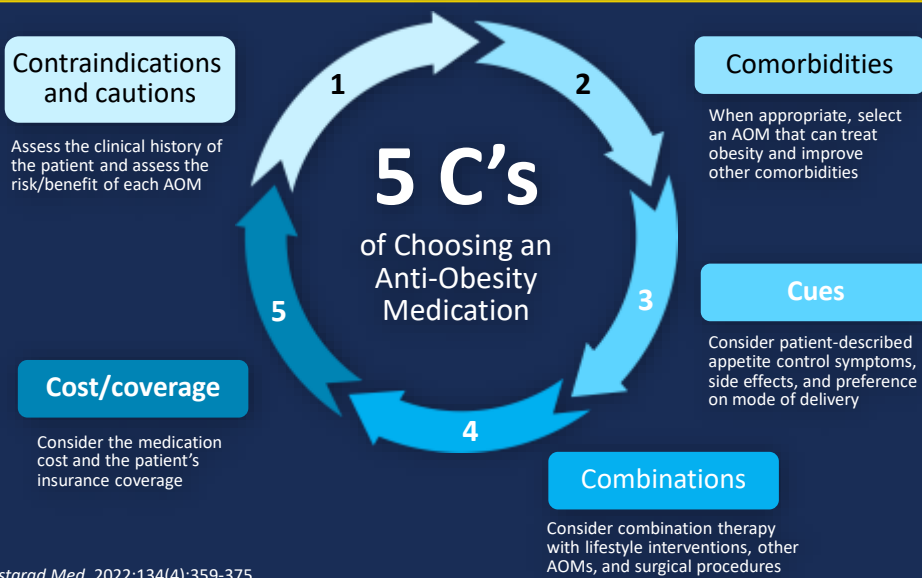
Efficacy of Existing Obesity Interventions



Allison DB, et al. *Obesity*. 2012;20:330-342. [EQUIP]; Gadde KM, et al. *Lancet*. 2011;37:1341-1352. [CONQER]; Greenway FL, et al. *Lancet*. 2010;376:595-605. [COR-I]; Apovian CM, et al. *Obesity*. 2013;21:935-943. [COR-II]; Wadden TA, et al. *Obesity*. 2011;19(1):110-120. [COR-BMOD]; Pi-Sunyer X, et al. *N Engl J Med*. 2015;373(1):11-22. [SCALE]; Wadden TA, et al. *In J Obes*. 2013;37:1443-1451. [SCALE MAIN]; Enebo LB, et al. *Lancet*. 2021;397(10286):1736-1748. [Cag + Sema]; Wilding JPH, et al. *N Engl J Med*. 2021;384(11):989. [STEP 1]; Wadden TA, et al. *JAMA*. 2021;325(14):1403-1413. [STEP 3]; Rubino D, et al. *JAMA*. 2021;325(14):1414-1425. [STEP 4]; Ryan D. *Lancet Diabetes Endocrinol*. 2021;9(5):252-254. [STEP]; Sjöström L, et al. *N Engl J Med*. 2007;357:741-52; Jastreboff AM, et al. *N Engl J Med*. 2022;387(3):205-216.

For illustrative purpose only. AoM, anti-obesity medications. Bubble size represents mean % weight loss.

Choosing an AOM



Horn DB, et al. *Postgrad Med.* 2022;134(4):359-375.

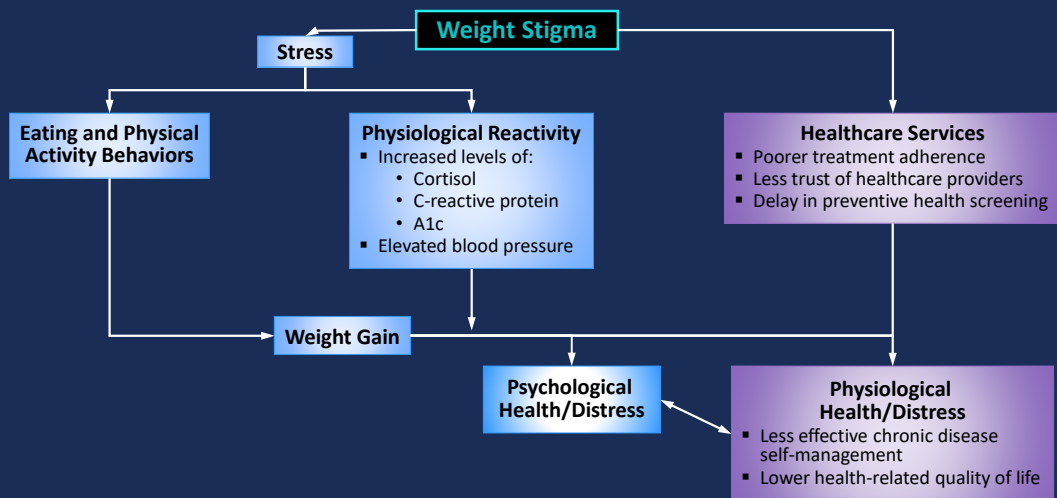
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When Is Bariatric Surgery Appropriate?

- Patients with BMI ≥ 40 kg/m² who are unable to lose adequate weight via lifestyle interventions and who have 1 or more weight-related health comorbidities (eg, T2D; hypertension; hyperlipidemia; OSA)
- HCP/patient dialogue should include discussion of potential long-term side effects (eg, possible need for additional surgery; gallbladder disease; malabsorption)
- Patients should be referred to high-volume centers with experienced surgeons

Addressing Stigma in Obesity Care

Overcoming Weight Stigma in the Treatment of Obesity



Puhl RM, et al. *Clin Diabetes*. 2016;34(1):44-50.

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American Medical Association People-First Language in Obesity

The American Medical Association (AMA):

- 1) encourages the use of person-first language (patients with obesity, patients affected by obesity) in all discussions, resolutions, and reports regarding obesity;
- 2) encourages the use of preferred terms in discussions, resolutions and reports regarding patients affected by obesity including weight and unhealthy weight, and discourages the use of stigmatizing terms including obese, morbidly obese, and fat; and
- 3) will educate healthcare providers on the importance of person-first language for treating patients with obesity; equipping their healthcare facilities with proper-sized furniture, medical equipment, and gowns for patients with obesity; and having patients weighed respectfully

Rudd Center of Food Policy and Obesity– Recommendations for Health Professionals

Consider	Consider patients' previous negative experiences
Recognize	Recognize that having obesity is a product of many factors
Explore	Explore all causes of presenting problems (not just weight)
Recognize	Recognize that many patients have tried to lose weight repeatedly
Emphasize	Emphasize importance of behavior change rather than weight
Acknowledge	Acknowledge the difficulty of making lifestyle changes
Recognize	Recognize that small weight losses can improve health

PART 2

**Learning Lab:
Overcoming Barriers to Optimal
Obesity Care**

Learning Lab Question 1

Do you follow expert guidance for obesity care? If so, which guidelines?

Learning Lab Question 2

How do you feel a diagnosis of obesity impacts patients?

Learning Lab Question 3

What modifications have you made or will you make to your practice to minimize patient perception of bias?

Learning Lab Question 4

What barriers do your patients face in accessing obesity treatment? How can these issues be addressed?

Learning Lab Question 5

How well do you collaborate with other members of the obesity care team? How have these approaches impacted patient outcomes?

Q&A

Post test



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