

OVERCOMING OBESITY

A PCP'S GUIDE TO COMPREHENSIVE OBESITY CARE



This activity is supported by an educational grant from Eli Lilly and Company.





Activity Overview

TARGET AUDIENCE

US primary care physicians, NPs, and PAs including those who are community-based, practice in large ACOs; in rural communities; and who serve patients in underserved areas

EDUCATIONAL OBJECTIVES

After completing this activity, the participant should be better able to:

- Integrate evidence-based approaches to diagnose, manage, and treat obesity, such as BMI, waist circumference, body fat percentage, and routine visits, especially in patients with concurrent comorbidities.
- Determine appropriate treatment with consideration of the latest clinical evidence, mechanism of action, side effects, drug administration frequency, and patient-specific factors when developing individualized treatment plans for patients with obesity.
- Employ shared decision-making and multidisciplinary approaches when discussing weight management strategies, including treatment and lifestyle modifications, to support optimal adherence and outcomes for patients with overweight/obesity.

Part 1: Addressing the Weight of the Matter: Diagnosing Obesity



Faculty



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Misconceptions, underdiagnosis, and undertreatment of obesity in primary care settings



Case Study

You are seeing a patient, Tomas, for a routine wellness exam. He expresses concern about weight gain (15 lbs) over the past year, despite a generally balanced diet and moderate exercise. Tomas reports feeling frustrated and demotivated by the lack of progress.

- Age: 39
- Current body mass index (BMI): 31
- Occupation: Desk job with long hours
- Family history: Father had type 2 diabetes (T2D) and cardiovascular disease (CVD)





Defining Obesity

A chronic, progressive, relapsing, and treatable multifactorial, neurobehavioral disease

Marked by an increase in body fat, which promotes adipose tissue dysfunction and abnormal fat mass physical forces



Results in adverse metabolic, biomechanical, and psychosocial health consequences



Underdiagnosis and Undertreatment

42%

Obesity Prevalence Among Adults in the US (BMI >30 kg/m²)

47% Hispanic

47% Non-Hispanic Black

38% Non-Hispanic White

13% Asian

Results from study of US health system data based on BMI:

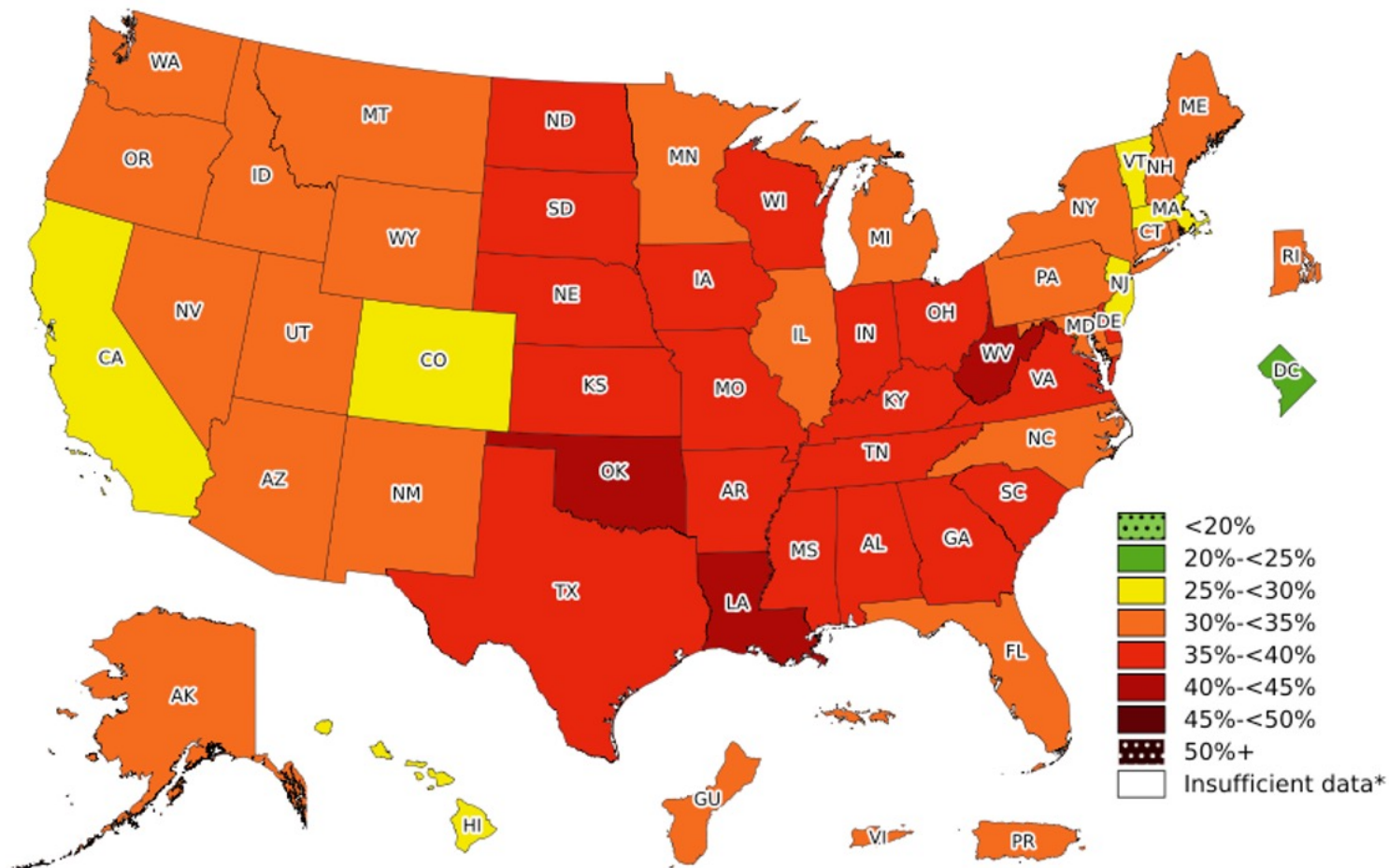
- Less than half of patients received formal diagnosis
- Using BMI cutoffs may miss half of patients who have obesity with excess visceral adiposity and lower BMI

Clinicians may

- Underestimate BMI values when calculating
- Not routinely discuss calculations with patients



Overall Obesity in the United States, 2022





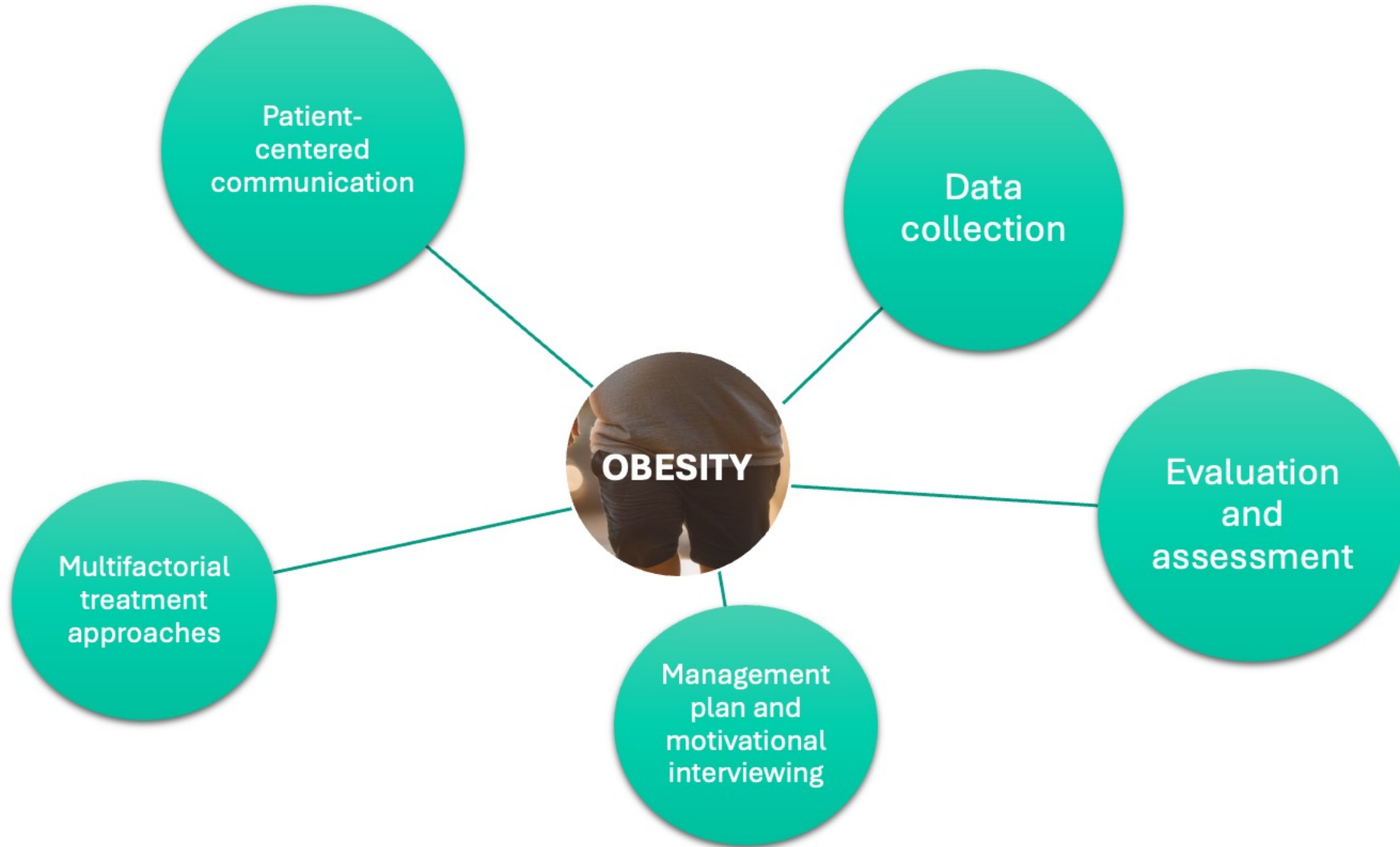
Underdiagnosis and Undertreatment

A persistent belief exists that obesity is a lifestyle decision rather than a disease requiring medical treatment

- **ACTION study**
 - 82% of people with obesity felt responsibility for losing weight
 - Only 72% of clinicians felt responsibility to aid in patients' weight loss
 - 23% of patients with obesity reported weight loss of 10% from baseline during prior 3 years
 - Only 54% of patients were concerned their weight might affect future health
- **OBSERVE study**
 - Barriers in use of anti-obesity medication (AOM) include
 - Concerns around side effects and affordability
 - Lack of awareness and knowledge of effectiveness



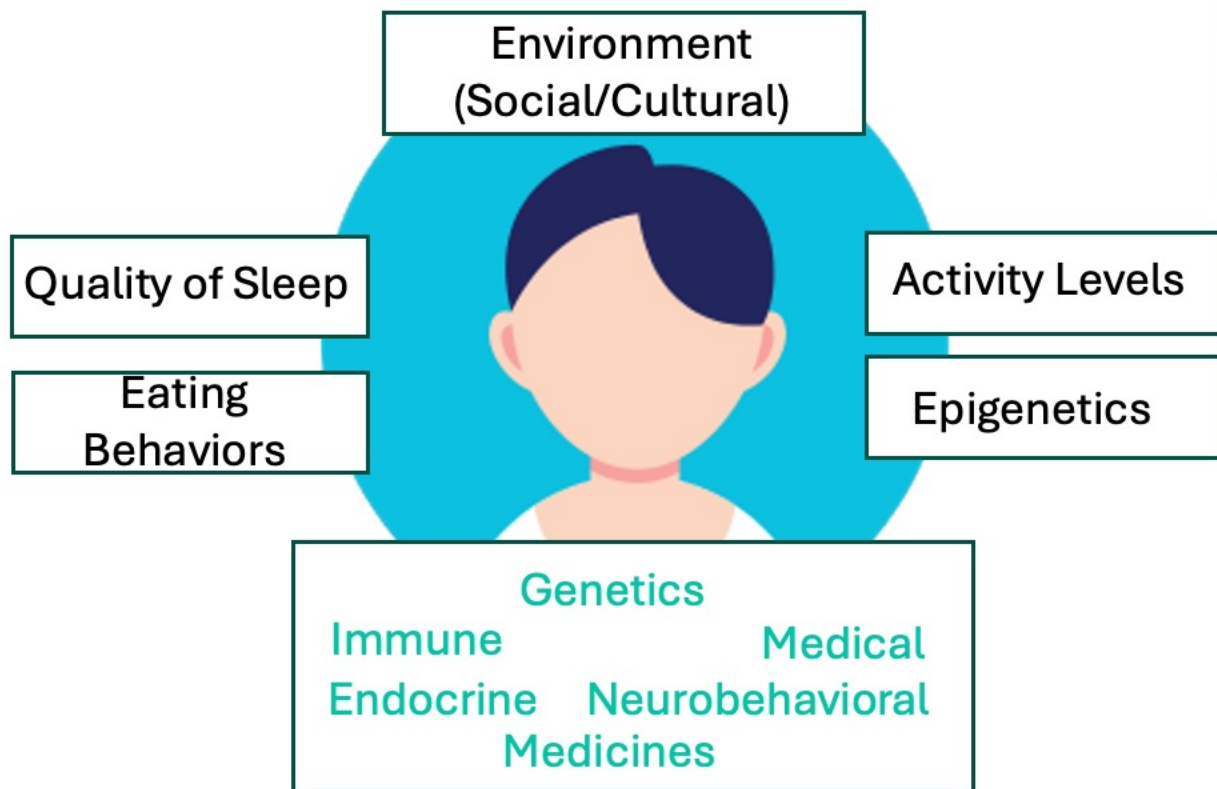
Treating Obesity as a Disease



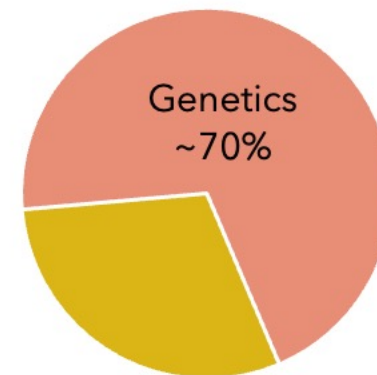


Treating Obesity as a Chronic Disease

“Obesity is a complex, multifactorial condition characterized by excess body fat. It must be viewed as a chronic disorder that essentially requires perpetual care, support, and follow-up. Obesity causes many other diseases, and it warrants recognition by health-care providers and payers.”



Average adult weight gain is 0.5 to 1 kg per year



Genetics contributes up to ~70% risk for obesity

- >100 genes/gene variants related to excess weight have been discovered
- There are complex interactions between genetic, behavioral, and environmental influences, resulting in epigenetic changes



Designation of Obesity as a Disease

Medical Associations and Societies

- American Association of Clinical Endocrinologists
- American Academy of Family Physicians
- American College of Cardiology
- American College of Surgeons
- American Medical Association
- American Society for Reproductive Medicine
- American Urological Association
- The Endocrine Society
- The Obesity Society
- The Society for Cardiovascular Angiography and Interventions

World / National Health Organizations

- World Health Organization
- Food and Drug Administration
- National Institutes of Health

Obesity is a disease:
leading obesity groups agree

June 19
2013

Clinical treatment guidelines in obesity care to diagnose obesity





Clinical Treatment Guidelines

Consensus Statement

January 2023

Key Point

- *The BMI (weight in kilograms/height in meters²) is used to screen for obesity, but it does not displace clinical judgment.*
- *BMI is not a measure of body fat.*
- *Social determinants, race, ethnicity, and age may modify the risk associated with a given BMI.*



Clinicians offer or refer adults with a BMI of 30 or higher to intensive, multicomponent behavioral interventions.

USPSTF Recommendation



Assess for the Presence of Obesity

BMI

(weight in kg)/(height in m)²

- BMI is the 1st step to determine the degree of overweight and obesity.
- It is a practical and useful determinant for increased risk of morbidity and mortality on the population level

Key Point

...but less so on the individual level

Percent Body Fat

Can be assessed by Dual-Energy X-ray Absorptiometry (DXA) scan, bioelectrical impedance, whole body air-displacement plethysmography, etc.

Key Point

Waist Circumference

Can be measured by tape measure around the abdomen at the level of the anterior superior iliac crests, parallel to the floor.

Tape should be snug against skin without compressing.





Screening & Diagnosis

- **Comprehensive evaluation**
 - BMI
 - History & Physical exam
 - Waist Circumference
 - Labs
- **Diagnosing obesity**
 - Additional considerations
 - Age, sex, level of hydration, muscular composition, presence of fluid in noncirculatory (“third”) space, and presence of sarcopenia, edema, and high-volume tumors
 - Weight-related complications
 - Prediabetes, T2D, dyslipidemia, hypertension, metabolic syndrome, CVD, MASLD, osteoarthritis, depression, OSA, asthma and reactive airway disease, and gastroesophageal reflux disease

Telehealth & Virtual Encounters
An increasingly important part of clinical practice

Virtual clinician face-to-face or telephonic encounters

Assessment	Diagnosis	Advice and education	Prognosis	Treatment
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BMI, body mass index; CVD, cardiovascular disease; MASLD, metabolic dysfunction-associated steatotic liver disease; OSA, obstructive sleep apnea; T2D, type 2 diabetes

Cornier MA. *Am J Manag Care*. 2022;28(15 Suppl):S288-S296; Fitch AK, Bays HE. *Obes Pillars*. 2022;1:100004; Jensen MD, et al. *J Am Coll Cardiol*. 2014;63(25 Pt B):2985-3023; Mechanick JL, et al. *Endocr Pract*. 2019;25(12):1346-1359; Nadolsky K, et al. *Endocr Pract*. 2023;29(6):417-427; Tondt J, et al. *Obesity Algorithm eBook*. Obesity Medicine Association; 2023. <https://obesitymedicine.org/obesity-algorithm-powerpoint/>. Accessed July 9, 2024.

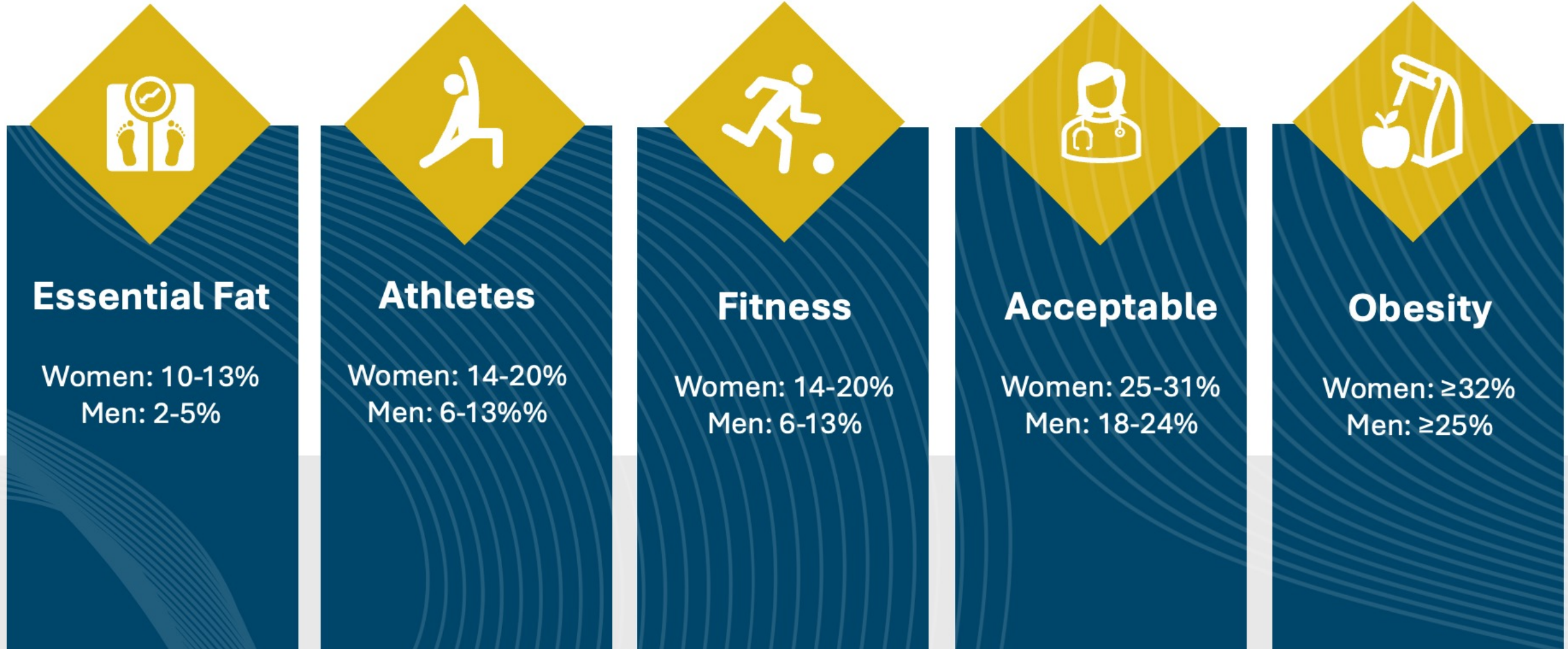


Assessment of Waist Circumference

Can be measured by tape measure around the abdomen at the level of the anterior superior iliac crests, parallel to the floor. Tape should be snug against skin without compressing.

BMI		Waist Circumference	
18.5-24.9	Normal weight	Male: <40 in	Female: <35 in
25.0-29.9	Overweight		
≥30	Obesity	Male: >40 in	Female: >35 in

American Council on Exercise Classification: Percent Body Fat*



*Based on expert opinion; cut-off points not scientifically validated





Obesity Assessment Guidelines: AAACE/ACE Framework

Key Point

BMI Category (kg/m ²)	Staging	Care Setting
18.5-24.9 <23 in patients of certain ethnicities	Normal weight (no obesity)	<ul style="list-style-type: none">• Primary care
25-29.9 23-24.9 in patients of certain ethnicities	Overweight	<ul style="list-style-type: none">• Primary care• Consider referral to obesity medicine specialist if treatment is not effective
≥30 ≥25 in patients of certain ethnicities	Obesity stage 1 (no complications)	<ul style="list-style-type: none">• Primary care• Consider referral to obesity medicine specialist
	Obesity stage 2 (≥ 1 mild to moderate complications)	<ul style="list-style-type: none">• Primary care• Consider referral to obesity medicine specialist
	Obesity stage 3 (≥ 1 severe complication)	<ul style="list-style-type: none">• Primary care• Consider referral to obesity medicine specialist

AAACE, American Association of Clinical Endocrinology; ACE, American College of Endocrinology.

Cornier MA. *Am J Manag Care*. 2022;28(15 Suppl):S288-S296; Mechanick JL, et al. *Endocr Pract*. 2019;25(12):1346-1359; Nadolsky K, et al. *Endocr Pract*. 2023;29(6):417-427; Tondt J, et al. *Obesity Algorithm eBook*. Obesity Medicine Association; 2023. <https://obesitymedicine.org/obesity-algorithm-powerpoint/>. Accessed July 9, 2024.



Case Study Revisited

Given Tomas's BMI of 31 and family history of T2D and CVD, how do you assess Tomas's BMI category and stage?
What is your plan of care for Tomas?



Obesity and associated comorbidities





Obesity Impacts Multiple Body Systems

Cardiovascular



- Congestive heart failure and cor pulmonale
- Heart failure with preserved ejection fraction or HFpEF
- Varicose veins
- Thromboembolic events (i.e., pulmonary embolus, stroke)
- Hypertension (i.e., compression of kidney by increased visceral fat)

Pulmonary



- Dyspnea
- OSA
- Hypoventilation/Pickwickian syndrome
- Asthma
- Upper respiratory infection

Neurologic



- Reduced subcortical grey matter
- Intracranial hypertension
- Stroke
- Nerve entrapment (i.e., meralgia paresthetica, carpal tunnel syndrome)

Musculoskeletal



- Immobility
- Osteoarthritis (e.g., knees, hips)
- Low back pain
- Myalgias
- Altered center of gravity
- Impaired balance

Gastrointestinal



- Gastroesophageal reflux
- Hernias

Integument



- Striae distensae
- Stasis pigmentation
- Venous stasis ulcers
- Cellulitis
- Skin tags
- Intertrigo (i.e., bacterial, fungal skin fold infections)
- Carbuncles



Weight-Related Complications of Obesity

Overweight or Obesity	Weight-Related Diseases or Complications
<p>Patients with BMI ≥ 25 or < 23 in patients of certain ethnicities</p>	<p style="text-align: center;">→</p> <p style="text-align: center;">Evaluate for weight-related complications</p> <p style="text-align: center;">←</p> <p style="text-align: center;">Evaluate for overweight or obesity</p> <ul style="list-style-type: none">• Prediabetes• T2D• Dyslipidemia• Hypertension• Metabolic syndrome• CVD• MASLD• PCOS• Female infertility• Male hypogonadism• Osteoarthritis• Depression• OSA• Asthma and reactive airway disease• Urinary stress incontinence• GERD

BMI, body mass index; CVD, cardiovascular disease; GERD, gastroesophageal reflux disease; MASLD, metabolic dysfunction-associated steatotic liver disease; OSA, obstructive sleep apnea; PCOS, polycystic ovary syndrome; T2D, type 2 diabetes



Prevalence of Concurrent Comorbidities with Obesity

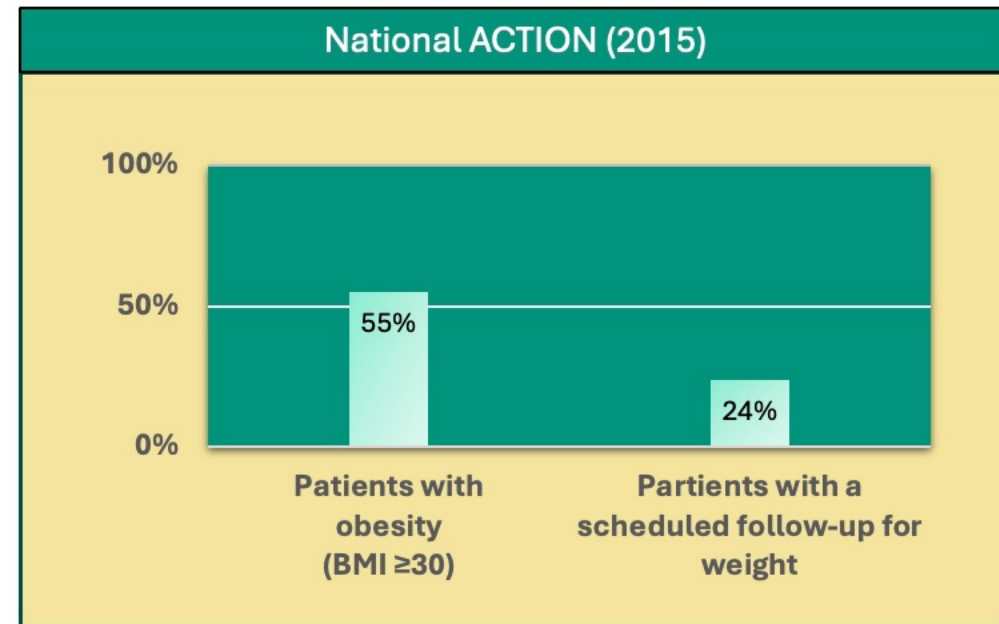
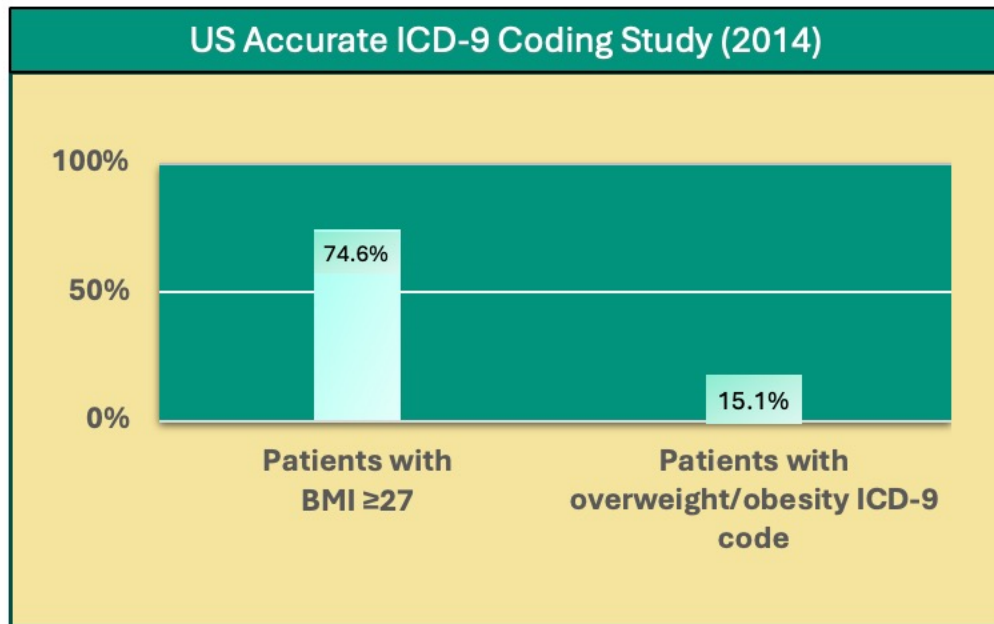


....have overweight or obesity.



T2D and Challenges for Patients with Overweight or Obesity

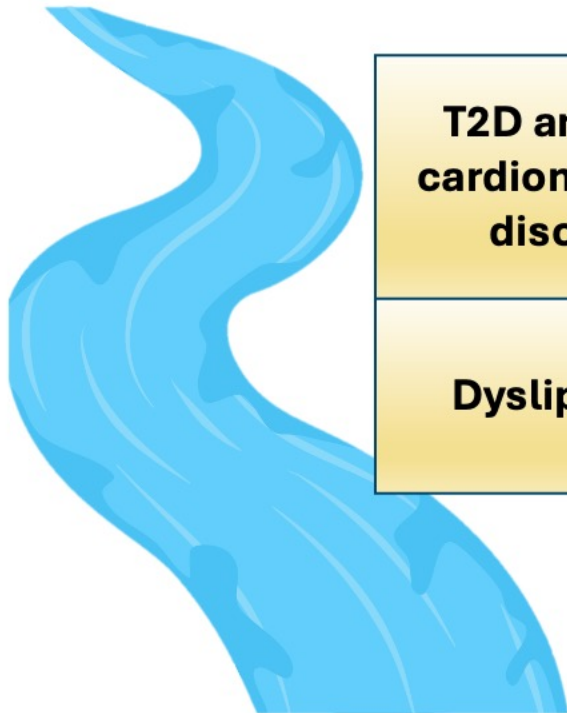
89.8% of adults with T2D are overweight or have obesity





Changing The Treatment Paradigm Upstream: Addressing Comorbidities in Primary Care *Before* They Occur

Weight loss can prevent or ameliorate comorbidities



T2D and other cardiometabolic disorders	Hypertension	PCOS	Male hypogonadism	Urinary stress incontinence
Dyslipidemia	MASLD	Female infertility	OSA	GERD



Case Study Revisited

How do you approach the topic of weight management with Tomas, knowing about his recent attempts at weight reduction, his sedentary desk job, and his family history of cardiometabolic disorders?



Up Next Part 2
**No One-Size-Fits-All
Approach: Individualizing
Obesity Treatment**



**THANK
YOU**