

Actor portrayal.



the weigh forward ▶

MODULE 1

Expanding the Quadruple Aim
Implementing a holistic approach for
patients, providers, and health systems



Obesity is a chronic disease, not just a lifestyle issue

A 2020 State of Obesity World Report recorded the number of adults with obesity in each state and found that all the states in the top 5 included more than **36% of adults with obesity**.¹

“Our AMA recognizes obesity as a disease state with multiple pathophysiological aspects requiring a range of interventions to advance obesity treatment and prevention.”²

- American Medical Association (AMA)

“Obesity is a complex, multifactorial condition characterized by excess body fat. It must be viewed as a chronic condition that essentially requires perpetual care, support, and follow-up. Obesity causes many other diseases, and it warrants recognition by healthcare providers and payers.”³

- American Association of Clinical Endocrinology/
American College of Endocrinology Obesity Task Force

National organizations recognize obesity as a multifaceted, chronic disease and a substantial threat to public health.²⁻⁴ Obesity is classified by a body mass index (BMI) of 30 kg/m² or greater.⁴



Impact of Obesity



Patients^{5,6}

- Obesity is associated with more than 200 comorbidities⁵
- Obesity is also directly associated with various cardiovascular risk factors (eg, increased blood pressure, LDL, and triglycerides)⁶



Health Systems⁷

- Increased frequency and intensity of care required by obesity and its associated conditions has caused an additional strain on health systems
- Health systems are covering the cost of care for chronic conditions (eg, heart disease, diabetes, sleep apnea, etc), which can result in higher premiums for all plan members to offset the costs of treating obesity-related conditions



Providers⁸

- As the prevalence of obesity continues to rise, it may often be misunderstood by those most impacted, such as patients and their providers
- Both patients and providers tend to view AOMs as a jump start for weight reduction rather than a chronic therapy that can extend to weight maintenance

AOM=anti-obesity medication; LDL=low density lipoprotein.

Both social and genetic factors contribute to the high prevalence of obesity



Social determinants of health (external factors)

- The environment has gradually changed to one in which high levels of physical activity are not required in daily life⁹
 - Technology has made it possible to be productive while being largely sedentary
- Food is abundant, inexpensive, and served in large portions⁹
- Behaviors contributing to obesity can be affected by the availability of healthy food and access to recreational areas¹⁰



Genetics (internal factors)

- A person's genetics may determine the extent to which external factors impact their weight^{11,12}
- Obesity can “run in the family”¹³
 - The good news is that family members can promote weight reduction among other family members by modeling healthy behaviors



From 1999 to 2020, the age-adjusted prevalence of obesity in adults increased from **30.5% to 41.9%**, and the prevalence of severe obesity increased from **4.7% to 9.2%**.¹⁴

Approximately 73% of the adult population have overweight or obesity, which can contribute to the costs of other chronic conditions^{15,a,b}

Breakdown by BMI category ^{15,b,c}				Obesity costs roughly \$86.9 billion ^{16,17,d}			
31.4%	22.0%	10.5%	8.6%	\$327 billion ^{18,e}	\$188 billion ^{19,f}	\$186 billion ^{20,g}	\$131 billion ^{21,h}
Overweight	Obesity - Class I	Obesity - Class II	Obesity - Class III	T2D	CAD	OA	HTN
(BMI ≥25 kg/m ² to 29.9 kg/m ²)	(BMI ≥30 kg/m ² to 34.9 kg/m ²)	(BMI ≥35 kg/m ² to 39.9 kg/m ²)	(BMI ≥40 kg/m ²)				

From 1999-2020 through 2017-2018, the age-adjusted United States obesity prevalence **increased from 30.5% to 41.9%**. During the same time, the prevalence of severe obesity nearly doubled, from 4.7% to 9.2%.¹⁴

Obesity costs approximately **\$86.9 billion**, roughly equivalent to the cost of hiring 1.7 million additional workers per year at \$51,170 each.^{16,17,22}

^aAdults aged ≥20 years.

^bBased on data from 2015 to 2018.¹⁵

^cPercentages do not sum to 100 because the percentage of people with BMI <18.5 kg/m² is not shown and the percentage of people with obesity is a subset of the percentage with overweight and obesity.¹⁵

^dAggregate cost of obesity among full-time employees in the United States, according to data from a 2006 survey, adjusted to 2019 inflation rates.

^eIncludes direct medical costs and the costs of lost productivity (2017).

^fIncludes direct (medical) and indirect costs of coronary artery disease (2017).

^gAggregate medical expenditures, including out-of-pocket costs (1996-2005; 2007 dollars).

^hHealthcare costs only (2003-2014, averaged).

BMI=body mass index; CAD=coronary artery disease; HTN=hypertension; OA=osteoarthritis; T2D=type 2 diabetes.



Actor portrayal.

Guidelines from AACE/ACE agree on AOM recommendations²³

AOMs are supported by AACE/ACE as an adjunct to lifestyle therapy in appropriate patients with obesity in 3 situations²³:



When individuals experience failure on lifestyle therapy alone



When individuals with overweight and at least 1 weight-related comorbidity or obesity experience weight regain after initial success on lifestyle therapy alone



When individuals with overweight and at least 1 weight-related comorbidity or obesity experience weight-related complications (particularly if severe)

Lifestyle modifications^a must be part of any weight-reduction intervention, but they are not always sufficient for maintaining weight reduction.⁴

^aLifestyle therapy consisting of a healthy meal plan, physical activity, and behavioral interventions. AACE=American Association of Clinical Endocrinology; ACE=American College of Endocrinology.

AACE/ACE framework guidelines incorporate AOMs²⁴

Diagnosis		Staging and treatment	
BMI ^a kg/m ² Anthropometric component	Clinical component ^b	Disease stage	Suggested therapy (based on clinical judgment)
<25 <23 in patients of certain ethnicities; waist circumference below regional/ethnic cutoffs		Normal weight (no obesity)	<ul style="list-style-type: none"> • Healthy lifestyle: Healthy meal plan/physical activity
25-29.9 23-24.9 in patients of certain ethnicities	Evaluate for presence or absence of adiposity-related complications and severity of complications <ul style="list-style-type: none"> • Metabolic syndrome • Prediabetes • Type 2 diabetes • Dyslipidemia • Hypertension • Cardiovascular disease • Nonalcoholic fatty liver disease 	Overweight stage 0 (no complications)	<ul style="list-style-type: none"> • Lifestyle therapy: Reduced-calorie healthy meal plan/physical activity/behavioral interventions
≥30 ≥25 in patients of certain ethnicities		Obesity stage 0 (no complications)	<ul style="list-style-type: none"> • Lifestyle therapy: Reduced-calorie healthy meal plan/physical activity/behavioral interventions • Anti-obesity medications^c: Consider if lifestyle therapy fails to prevent progressive weight gain (BMI ≥27)
≥25 ≥23 in patients of certain ethnicities		<ul style="list-style-type: none"> • Polycystic ovary syndrome • Infertility (women) • Hypogonadism (men) • Obstructive sleep apnea • Asthma/reactive airway disease • Osteoarthritis • Urinary stress incontinence 	Obesity stage 1 ^d (1 or more mild to moderate complications)
≥25 ≥23 in patients of certain ethnicities	<ul style="list-style-type: none"> • Gastroesophageal reflux disease • Mental depression 	Obesity stage 2 ^d (at least 1 severe complication)	<ul style="list-style-type: none"> • Lifestyle therapy: Reduced-calorie healthy meal plan/physical activity/behavioral interventions • Anti-obesity medications^c: Initiate concurrently with lifestyle therapy (BMI ≥27) Consider bariatric surgery (BMI ≥35)

^aBMI values are not dependent upon age or sex. However, values may not correspond to the same amount of adiposity in different populations [including certain ethnic groups].

^bStaging of a complication as mild, moderate, or severe is based on criteria specific to each particular complication.

^cThe 2016 guideline uses the term “weight-loss medication.” “Anti-obesity medications” is now preferred.

^dNote that a diagnosis of obesity stage 1 or stage 2 may be given to an individual classified as overweight by BMI but who has weight-related complications.

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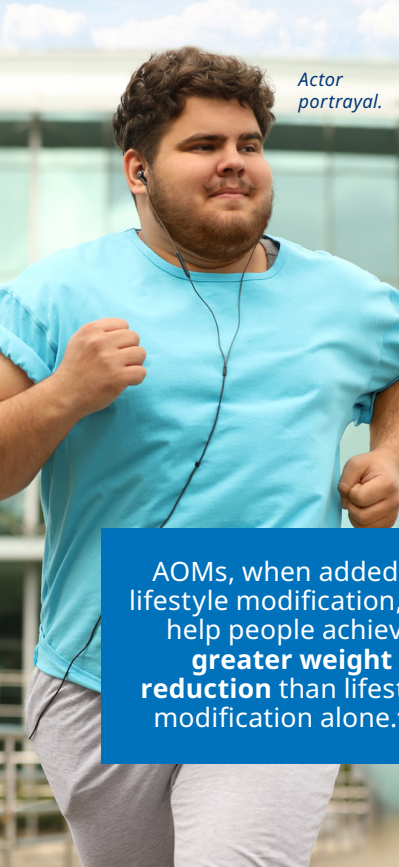
Obesity management may require several treatment approaches^{4,25,a}

AHA/ACC/TOS guidelines stepwise approach

Treatment	BMI category (kg/m ²)				
	25-26.9	27-29.9	30-34.9	35-39.9	≥40
Diet, physical activity, and behavior therapy	Yes, with comorbidities	Yes	Yes	Yes	Yes
Pharmacotherapy		Yes, with comorbidities	Yes	Yes	Yes
Surgery			Yes, considered when with metabolic disease	Yes	Yes

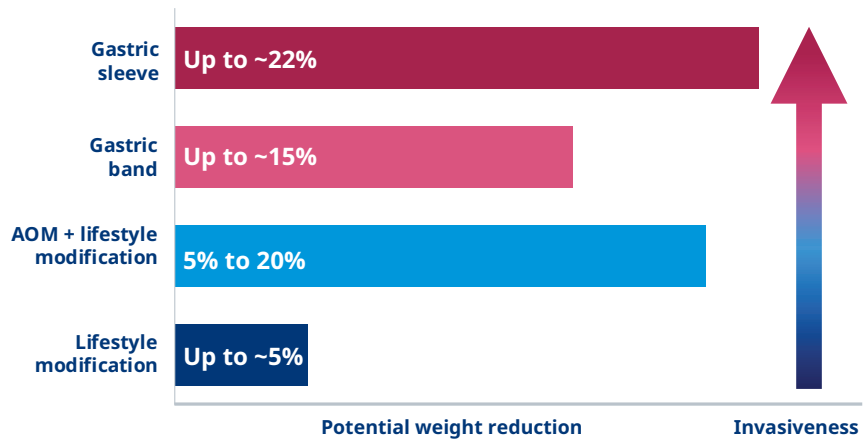
Lifestyle modifications must be part of any weight-reduction intervention, but alone may not be sufficient for maintaining weight reduction.^{4,25,26}

Obesity Management



Providing a comprehensive range of obesity-management options may help meet the needs of individuals with obesity

Available treatments for obesity vary in indication, effectiveness, and invasiveness^{4,23,27-29}



AOMs, when added to lifestyle modification, can help people achieve **greater weight reduction** than lifestyle modification alone.^{4,23}

^a“Yes” alone means that the treatment is indicated regardless of presence or absence of comorbidities. The solid arrow signifies the point at which treatment is initiated.⁴



Patients with overweight or obesity on AOMs and lifestyle counseling experienced notable weight reduction^{30,a,b}



10.4%
average weight
reduction maintained

for



4.4 years
mean follow-up from
baseline to final visit

- According to the AACE/ACE obesity guidelines, a 5% to ≥15% weight reduction is associated with a reduction in cardiovascular risk factors such as type 2 diabetes, hypertension, dyslipidemia, and obstructive sleep apnea²³

The AMA and CMS support health insurance coverage for AOMs^{31,32}

The AMA supports health insurance coverage parity for evidence-based treatment of obesity³¹

The AMA recognizes that³¹:



The cost of weight-reduction medication can be a substantial access barrier for people with obesity, unless their health plan provides coverage



Insurance coverage barriers limit the broad accessibility of these medications



Providing evidence-based treatment options, including AOMs, aligns with a comprehensive approach to manage obesity and may reduce health complications

The AMA's policy includes coverage of FDA-approved medications **without exclusions or additional carve-outs.**³¹

Medicare and Medicaid

In 2024, CMS clarified that AOMs that receive FDA approval for additional medically accepted indications must be covered by Medicaid and considered Part D drugs for that specific use.^{32,33}

AOMs that receive FDA approval for chronic weight management alone would not be considered a Part D drug but may be covered by certain state Medicaid programs.^{32,33}



To see which states currently have AOMs covered by Medicaid, please visit novonordiskworks.com

^aA retrospective study involving 428 patients were studied who received counseling from an obesity-medicine specialist that focused on a low-glycemic diet and exercise, as well as AOMs for weight management based on provider- and patient-led risk benefits discussion. The study utilized a range of pharmacologic treatment options for weight management.³⁰

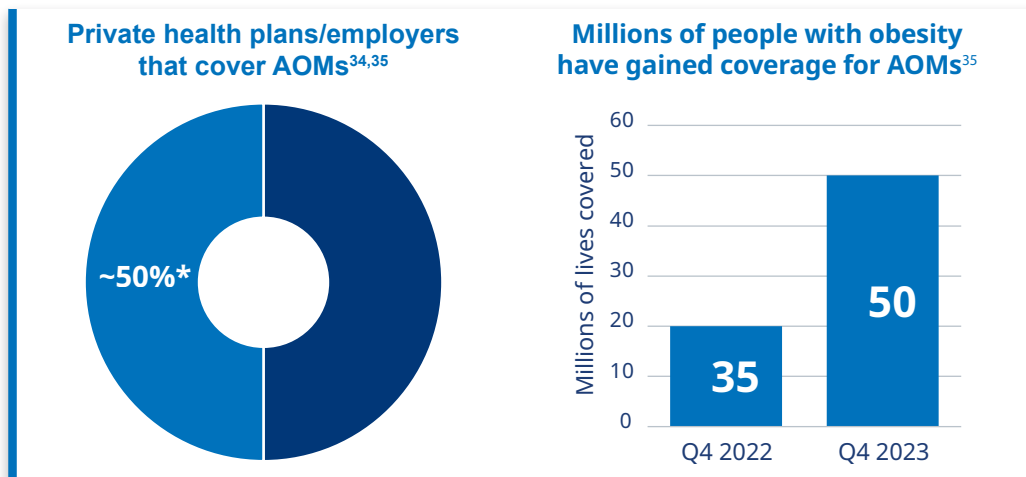
^bDespite initial success, 59.8% of patients experienced weight regain.³⁰

AMA=American Medical Association; CMS=Centers for Medicare & Medicaid Services; FDA=U.S. Food and Drug Administration.



Actor portrayal.

Patients with overweight and obesity are increasingly getting health insurance coverage for AOMs



The Quadruple Aim and clinical pathways for obesity management

The Quadruple Aim³⁶



An expansion of the Triple Aim, which was:

- Enhancing patient experience
- Improving population health
- Reducing costs



The stressful worklife of clinicians and staff has become apparent in the challenges of achieving and maintaining the initial goals of the Triple Aim

- Resources are lacking to help providers and staff maintain these overarching goals
- Professional burnout and reduced job satisfaction have hindered the ability of providers and staff to continue providing quality care



A fourth aim was added to improve the work life of healthcare providers

- Named “Joy in Work”
- This has been proposed to create a more symbiotic relationship between patients and healthcare providers



Actor portrayal.

*As of January 2024.³⁵

Addressing the Quadruple Aim With Clinical Pathways in Obesity Management

Comprehensive clinical pathways can support achieving the Quadruple Aim by³⁷:

- **Reducing administrative burden** on healthcare providers by promoting an efficient and effective process
- **Optimizing information integration** capabilities through EHRs
- **Improving care coordination** by outlining roles and responsibilities along the care continuum
- Achieving **improved clinical outcomes**

Building clinical pathways, such as those for obesity management, is a way for health systems to address the tenets of the Quadruple Aim³⁷

- Enhance **patient** experience
- Improve **population** health
- Reduce **costs**
- Improve the work life of **healthcare providers**



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