



The Giant Racer, painting by Cyril Power / WikiArt

Surgery, Pharmacotherapy, and Chronic Care for Obesity: Where Does All This Lead?

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August 7, 2025

Disclosures

- **Professional fees**
 - Amgen
 - Boehringer Ingelheim
 - Emerald Lake Safety
 - Novo Nordisk
 - Nutrisystem
 - Roman Health Ventures
- **Personal biases that favor:**
 - Evidence-based interventions, both prevention and treatment
 - Respect for people living with obesity
 - Critical thinking about all evidence

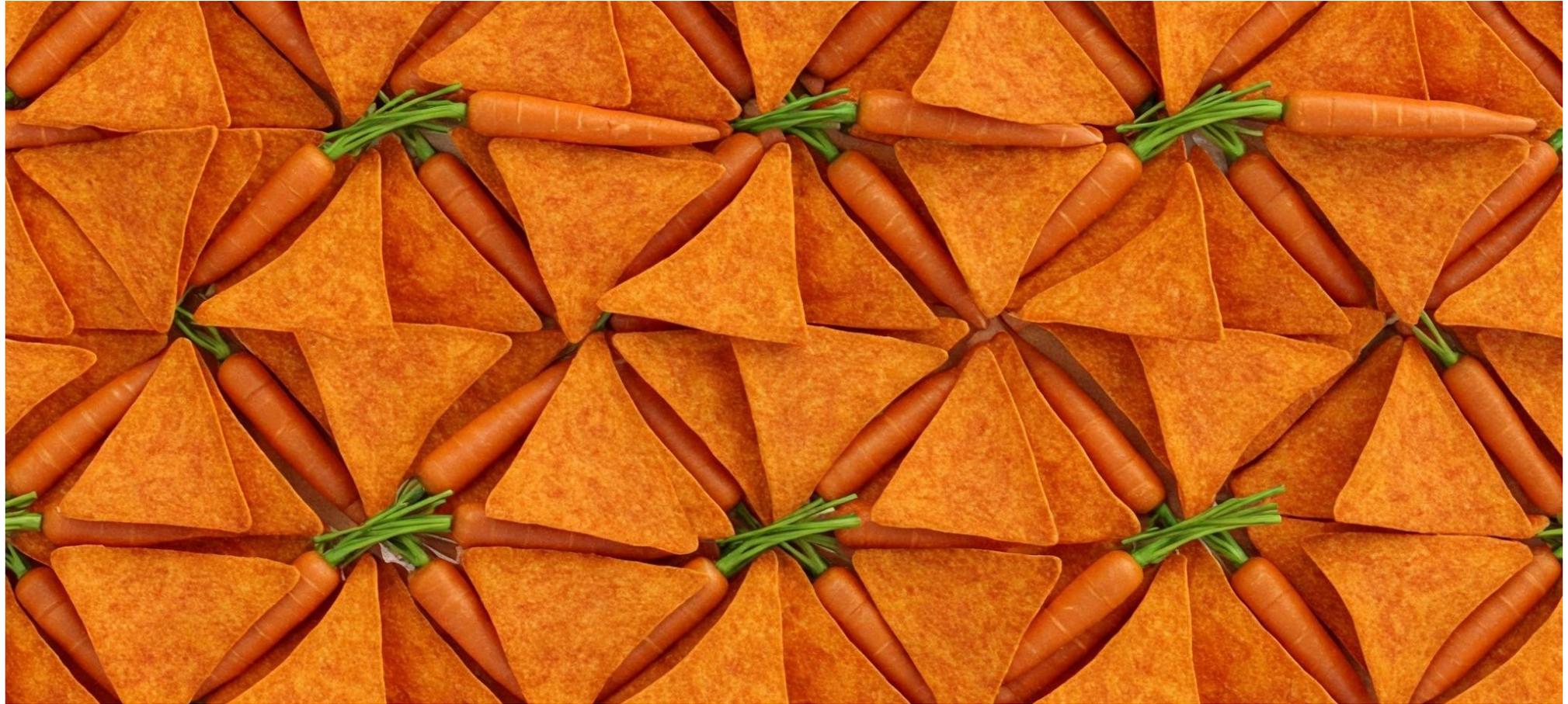
Presentation Objectives

- Examine trends in:
 - The understanding of obesity
 - Obesity care
- Review how GLP-1s are reshaping patient behaviors and expectations
- Explore implications for:
 - Surgery
 - Chronic care
 - Pharmacotherapy



High Trestle Trail Bridge, photograph by Tony Webster / Wikimedia Commons

Scanning for Patterns in Observational Data



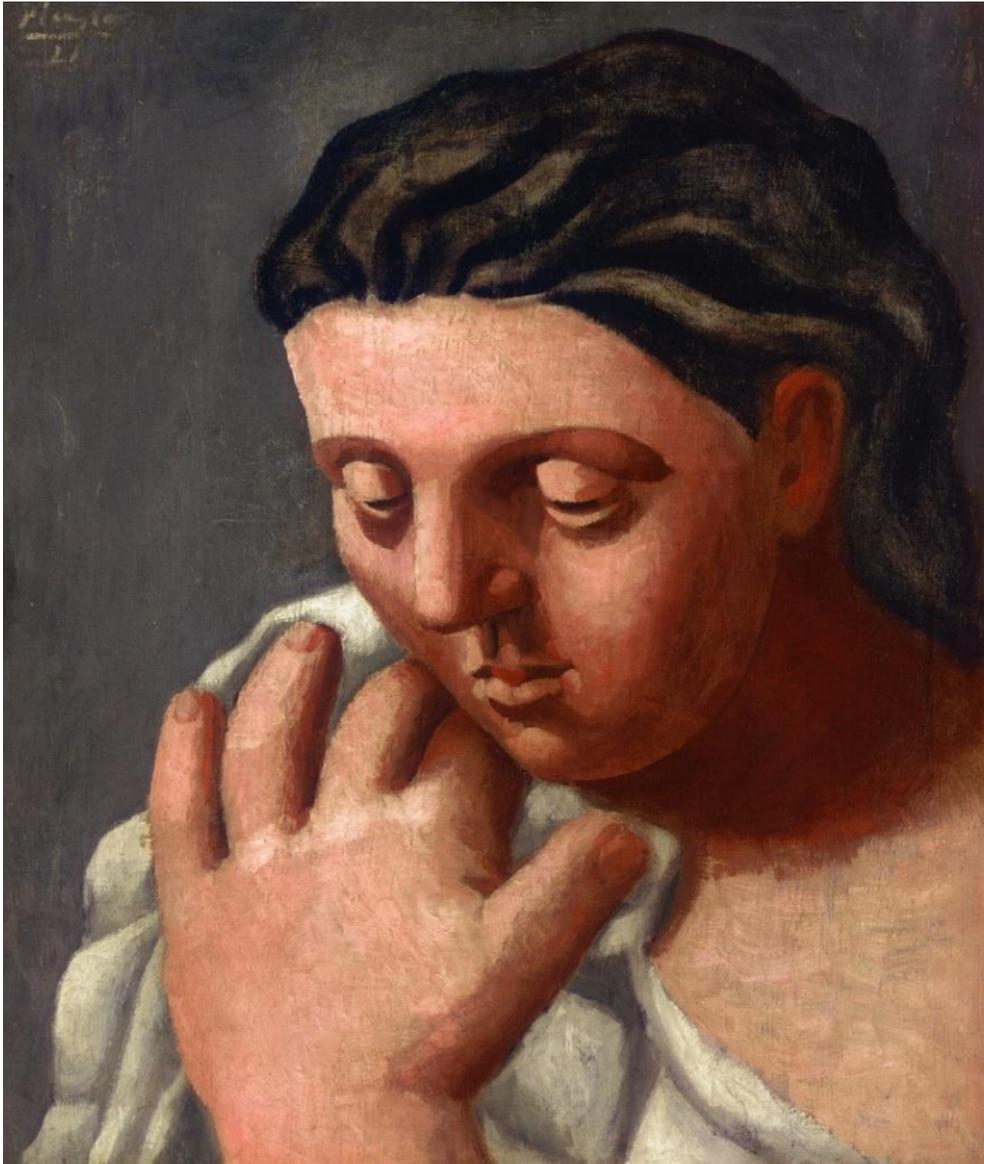
Tessellation of Carrots and Chips, illustration from Gemini AI image generation

Where Does All This Lead?

Obesity Medicines Are Changing the Lived Experience of Obesity



The Giant Racer, painting by Cyril Power / WikiArt



Woman's Head and Hand, painting by Pablo Picasso / WikiArt

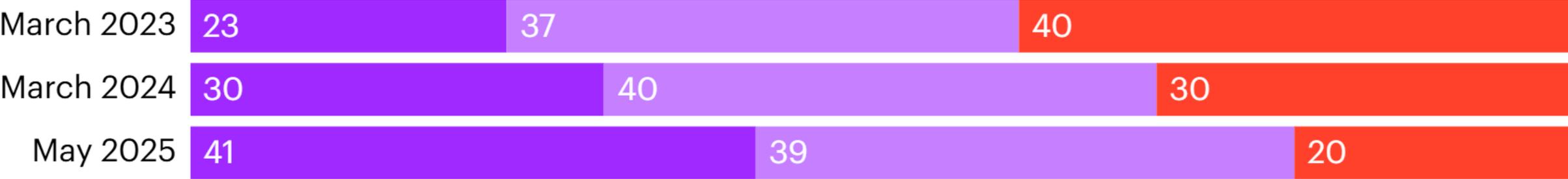
“The lived experience of obesity is clearly much more complex than the typical societal narrative, and just like in other areas of healthcare, the lived experience offers a richness of information that should be better understood and translated. This may also help to regain compassion and empathy in both wider and focused healthcare approaches related to obesity.”

– Flint et al in *Diabetes, Obesity and Metabolism*, 2025

Awareness of New Obesity Medicines Is Growing

How much have you heard about or read in the news recently about an antidiabetic and weight loss drug called semaglutide (sold under the brand names Ozempic, Wegovy, and Rybelsus)? (% of U.S. adult citizens)

A lot A little Nothing at all



March 22 - 27, 2023
March 11 - 13, 2024
May 22 - 25, 2025

These Drugs Move Many People to Say They Are Life-Changing

“Even though I started taking it for my heart health, I’ve been struck by how much better it has made me feel across the board. It’s made a significant impact on my overall health. Aches, pains and stiffness have vanished. Physically, I feel a decade younger, as well as clearer-headed and more optimistic than I’d been in years. As far as side effects, I’ve also lost around 20 pounds.

And it’s not just me; millions of Americans have experienced similar life-changing benefits, regardless of why they started on these medications.”

The New York Times

John Fetterman: This Drug Changed My Life. More Americans Need Access.

April 8, 2025



Weight-loss drugs draw Americans back to the doctor

By Deena Beasley

December 16, 2024 8:58 PM EST · Updated 5 months ago



More People Are Seeking Care

“This is a population that previously felt stigmatized by health care providers and often didn't return. But now that they're actually seeing themselves get healthier, asking clinicians questions and engaging more, I do think we're seeing new patients.”

*– Obesity Medicine Physician Rekha Kumar,
interviewed by Deena Beasley for Reuters,
December 17, 2024*

But These Medicines Are Out of Reach for Many People



Apple Out of Reach, illustration from ChatGPT 4o image generation

“The initiation of newer obesity medicines in overweight and obesity remains low, but uptake has increased exponentially since 2022. Our findings reveal significant disparities in obesity care, highlighting the importance of addressing inequities in obesity medicine access to improve obesity outcomes.”

– Radwan et al in *Diabetes, Obesity and Metabolism*, 2025



Rose and Amélie, painting by Edvard Munch / WikiArt

Where Does All This Lead? **Social and Economic Behavior**

Social Interactions and Economic Priorities Are Shifting



Table Set and Ready, photograph by El Ronzo, CC BY-ND 2.0

Eating Is a Social Behavior and These Medicines Have a Profound Effect



The New York Times

Account ▾

Group Dining on Ozempic? It's Complicated.

As the use of GLP-1s soars in popularity, diners are wrestling with new restaurant etiquette dilemmas — and adjusting accordingly.



NY Times, May 12, 2025, Alyson Krueger

Eating Is a Social Behavior and These Medicines Have a Profound Effect

“Diners on GLP-1s are figuring out which types of restaurants they feel comfortable visiting; how to leave food on their plates without insulting the chef or their dining companions; and how to get the most value out of the experience. Those not on the drugs are contending with the pros and cons of going out with people who don’t do much eating.”

Group Dining on Ozempic, NY Times, May 12, 2025, Alyson Krueger

Food Preferences and Purchasing Patterns Change



Food Quality and Preference

Volume 129, August 2025, 105507



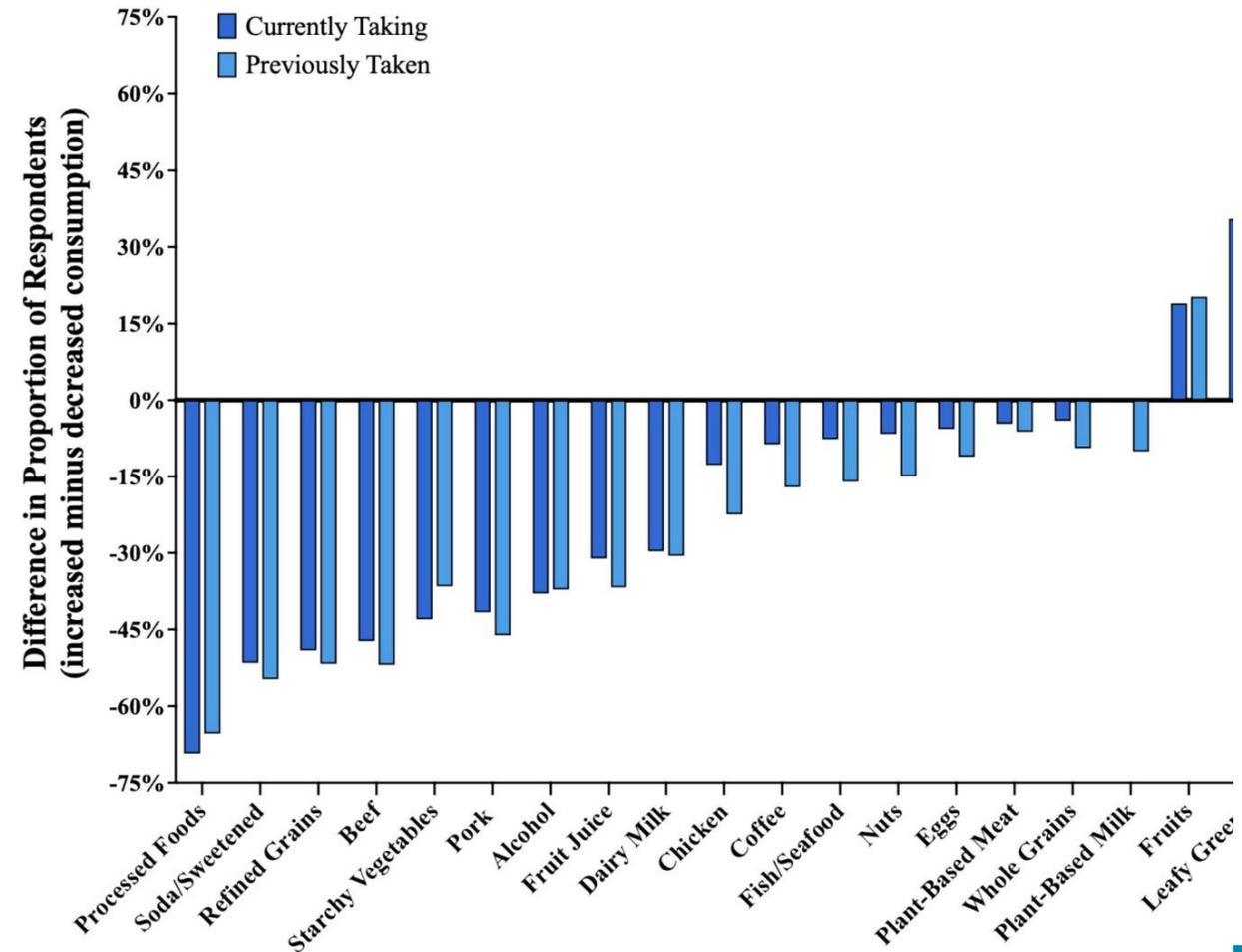
Short Communication

Characteristics and food consumption for current, previous, and potential consumers of GLP-1 s

Andrew Dilley ^a, Saroj Adhikari ^a, Pratikshya Silwal ^a, Jayson. L. Lusk ^b,
Brandon R. McFadden ^a  

Food Preferences and Purchasing Patterns Change

- Individuals taking GLP-1 agonists consume less food
- Reduced consumption of
 - Processed foods
 - Sugar-sweetened beverages
 - Refined grains and beef
- Consumption of water, leafy greens, and fruits rose



Dilley et al, *Food Quality & Preference*, 13 March, 2025, CC BY-NC-ND 4.0



Food Market, photograph by Angelo Benedetto, CC BY-NC-ND 2.0 via flickr

Where Does All This Lead? Food and Consumer Marketing

Food Marketing Is All About Adapting to Shifting Consumer Needs



The New York Times

Account ▾

In the Ozempic Age, Has 'Craveable' Lost Its Selling Power?

The food industry has long touted its products as impossible to resist. But with a spotlight on the perils of compulsive eating, that tactic is getting another look.



NY Times, January 16, 2024, Kim Severson

Food Marketing Is All About Adapting to Shifting Consumer Needs



NY Times, November 19, 2024, Tomas Weber

Food Marketing Is All About Adapting to Shifting Consumer Needs

“Right now, the industry’s adaptation to Ozempic is in its infancy. A few companies have tested the waters: Nestlé, for example, has started a line of frozen meals targeted at people taking GLP-1s called Vital Pursuit — frozen pizzas, sandwich melts and chicken bowls with ‘a sharper focus on smaller portions.’”

NY Times, November 19, 2024, Tomas Weber

Food Marketing Is All About Adapting to Shifting Consumer Needs

“For food brands, any group with a particular set of unfulfilled desires is a market waiting to be addressed, and in Reddit and Facebook communities for people taking these drugs, those newly prescribed ask the same few questions constantly. Chiefly among them: **‘What do you guys on these meds eat?’**”

– Amanda Mull, *Food Companies Want a Piece of the Ozempic Pie, Too*, Bloomberg, May 28, 2024



Photo by Ted Kyle / ConscienHealth



Woman at a Vegetable Stand, painting by Pieter Aertsen / WikiArt

**Market Forces
May Prompt
Food Marketing
to Shift
from Volume
to Quality**

Where Does All This Lead?
**Implications for
Obesity Care**



The Giant Racer, painting by Cyril Power / WikiArt



Old Bourke Hospital Bed, photograph by Matthew Perkins, CC BY-NC 2.0 via flickr

Where Does All This Lead? Health Systems

Since Forever, Health Systems Assumed Preventing Obesity Could Be Simple

1974

“Most Obesity Could, with Care, Be Prevented”

doi: [10.1016/S0140-6736\(74\)93004-9](https://doi.org/10.1016/S0140-6736(74)93004-9)

THE LANCET

Volume 303, Issue 7845, 5 January 1974, Pages 17-18

Infant and Adult Obesity

OBESITY is the most important nutritional disease in the affluent countries of the world. In the absence of an internationally agreed criterion for diagnosis an exact figure for prevalence cannot be given, but surveys in Britain and the United States show that about a third of the population is overweight to an extent associated with diminished life expectancy.¹

The exact significance of hyperplastic and hypertrophic obesity is still not clear, but on balance the evidence suggests that we need to be more vigilant in preventing obesity throughout childhood. Probably the obese adult can never be “cured”, but most obesity could, with care, be prevented.

doi: [10.1016/S0140-6736\(74\)93004-9](https://doi.org/10.1016/S0140-6736(74)93004-9)

And Treatment Was Seen as Futile

April 28, 1993

JAMA[®]

Futility and Avoidance

Medical Professionals in the Treatment of Obesity

Arthur Frank, MD

JAMA. 1993;269(16):2132-2133. doi:10.1001/jama.1993.03500160102041

Abstract

TWENTY years ago, I changed course in my internal medicine practice and decided, rather deliberately, to work on the problem of obesity. My friends, my colleagues, and my family thought I was crazy. The warnings were clear. "Don't risk your credibility and your career." "Don't venture into a part of medicine that no one takes seriously." "Don't move into the world of quacks and charlatans."

So Health Professionals Rarely Even Diagnosed It

 JAMA Internal Medicine

Research Letter

FREE

February 9, 2009

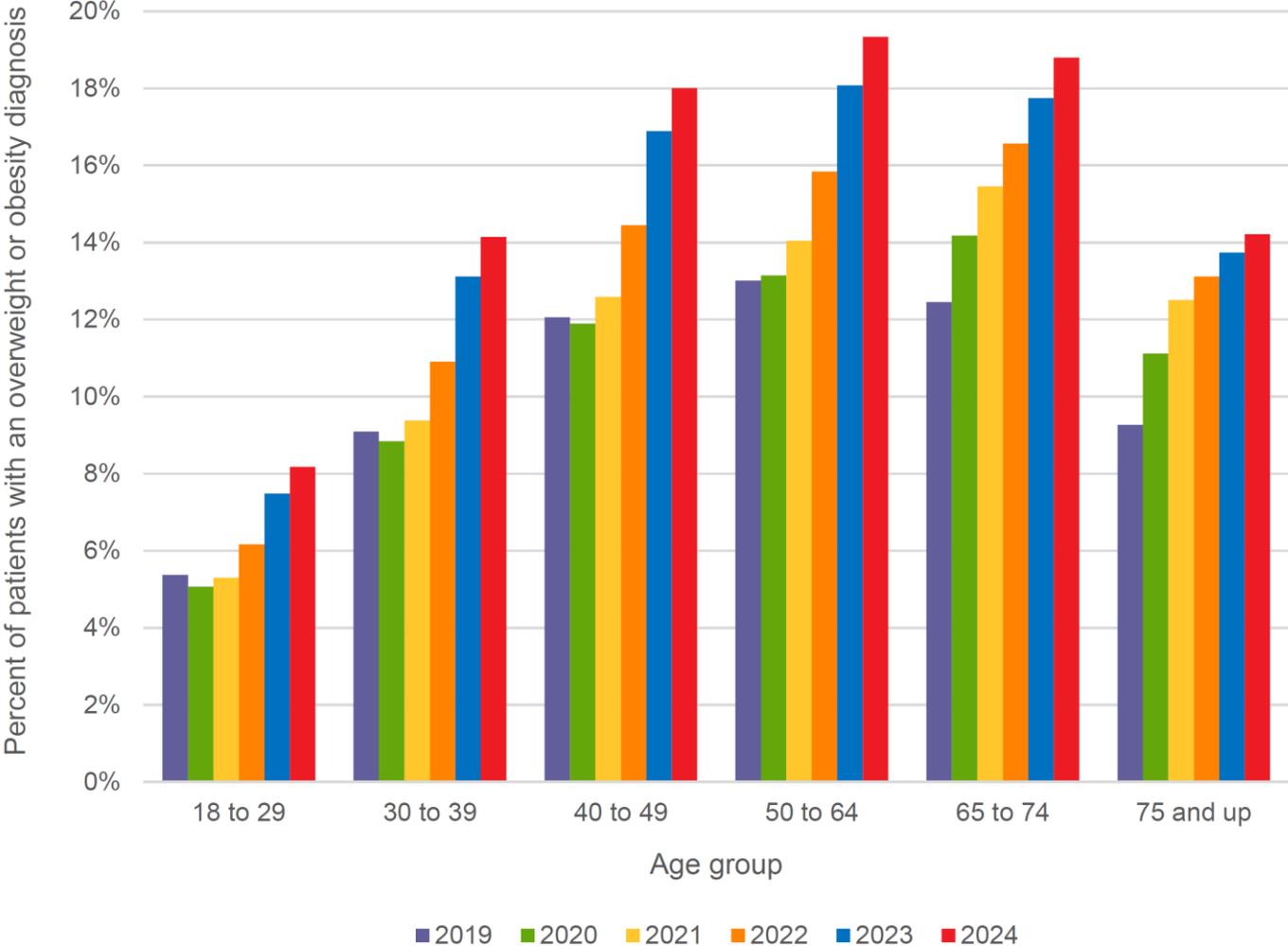
Underdiagnosis of Obesity in Adults in US Outpatient Settings

Jun Ma, MD, PhD; Lan Xiao, PhD; Randall S. Stafford, MD, PhD

Article Information

Arch Intern Med. 2009;169(3):312-316. doi:10.1001/archinternmed.2008.582

With GLP-1s Approved for Obesity, the Rate of Diagnosis Has Risen 50% in Just Five Years



Source: FAIR Health white paper, Obesity and GLP-1 Drugs, May 27, 2025

Health Systems Can't Yet Deliver Obesity Care at Scale

Obesity Care at Scale Will Profoundly Change Health Systems

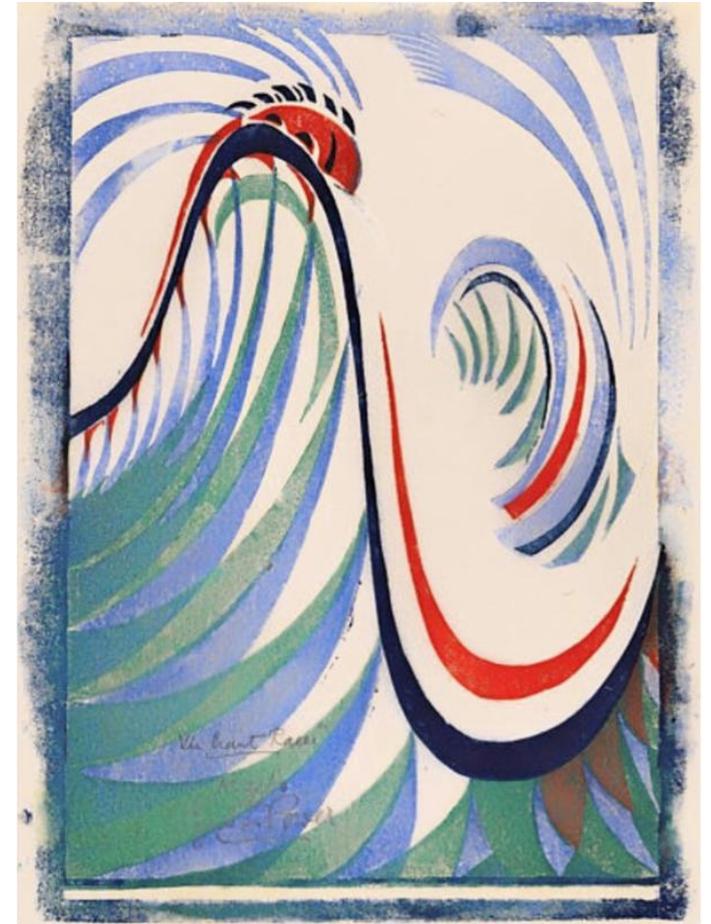
Think about it. Profound change is coming to healthcare and health systems because of the imperative for obesity care at scale. Right now, we are seeing only a faint glimmer of the changes that lie ahead.

That's because the biggest struggles with this change are very basic. Lilly and Novo Nordisk are straining to produce enough of their new obesity medicines to meet long-suppressed demand for obesity treatment. Only after these companies and their competitors begin to meet the demand will the full magnitude of change be apparent as it ripples through health systems.

The First Wave

The first wave of change to healthcare is most apparent in primary care and metabolic surgery.

Primary care has been so ill-equipped to provide adequate obesity care that many patients are seeking care in other settings. The most obvious of these is [telemedicine](#). Innovators like Ro, Form Health, and many others are investing in providing credible obesity care. If persons with obesity [may feel less stigma](#) in this setting, then this option may be a force for positive change.



Payers Are Desperate to Limit Access

The New York Times

OPINION
GUEST ESSAY

The Miracle Weight-Loss Drug Is Also a Major Budgetary Threat

March 4, 2024



But Resistance Is Futile

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HEALTH | PHARMA

Should Everyone Be Taking Ozempic? Doctors Say More People Could Benefit

Anti-obesity drugs are showing promise for ever-expanding list of diseases

By *Peter Loftus* May 25, 2025 10:00 pm ET

But Resistance Is Futile

BenefitsPRO.

Survey: 36% of employers now cover GLP-1s for weight loss & diabetes

The average representation of GLP-1 drugs used for weight loss in total annual claims was 10.5% for 2025, an increase over the 2024 average of 8.9%.

By **Alan Goforth** | May 27, 2025 at 11:49 AM



Talk Talk, photograph by Thomas Hawk, CC BY-NC 2.0 via flickr

Where Does
All This Lead?
**Public
Discourse
About
Obesity**

The Once-Dominant Bias About Obesity Is Fading

The best place to start is by simply telling the patient the truth.

“Sir or Madam, it’s not OK to be obese. Obesity is bad. You are overweight because you eat too much. You also need to exercise more. Your obesity cannot be blamed on the fast food or carbonated beverage industry or on anyone or anything else.

***You weigh too much because you eat too much.
Your health and your weight are your responsibility.”***

Robert Doroghazi, MD

AJM, Mar 2015

More People Are Telling Their Story and Putting a Face on the Lived Experience of Obesity



Nathalie, photograph © Garen Dibartolomeo

Obesity A Research Journal



Original Article | Open Access |

Blatant Dehumanization of People with Obesity

Inge Kersbergen , Eric Robinson

First published: 02 April 2019 | <https://doi.org/10.1002/oby.22460> | Citations: 45

Conclusions

This study provides the first evidence that people with obesity are blatantly dehumanized. This tendency to consider people with obesity as less human reveals the level of obesity stigma and may facilitate and/or justify weight discrimination.

Most People Now Reject Explicit Weight Bias

Dimension	Explicit Bias Trend 2007-2020	Implicit Bias Trend 2007-2020
Sexuality	↓	↓
Race	↓	↓
Skin Tone	↓	↓
Age	↓	↔
Disability	↓	↔
Weight	↓	↑ ↔

Explicit bias no longer goes unnoticed, but implicit bias is sneaky and prevalent

Source: Charlesworth & Banaji, 2022, *Psychological Science*

Effective GLP-1 Therapies Reveal the Flaws in Thinking Obesity Is Simply a Problem of Bad Behaviors

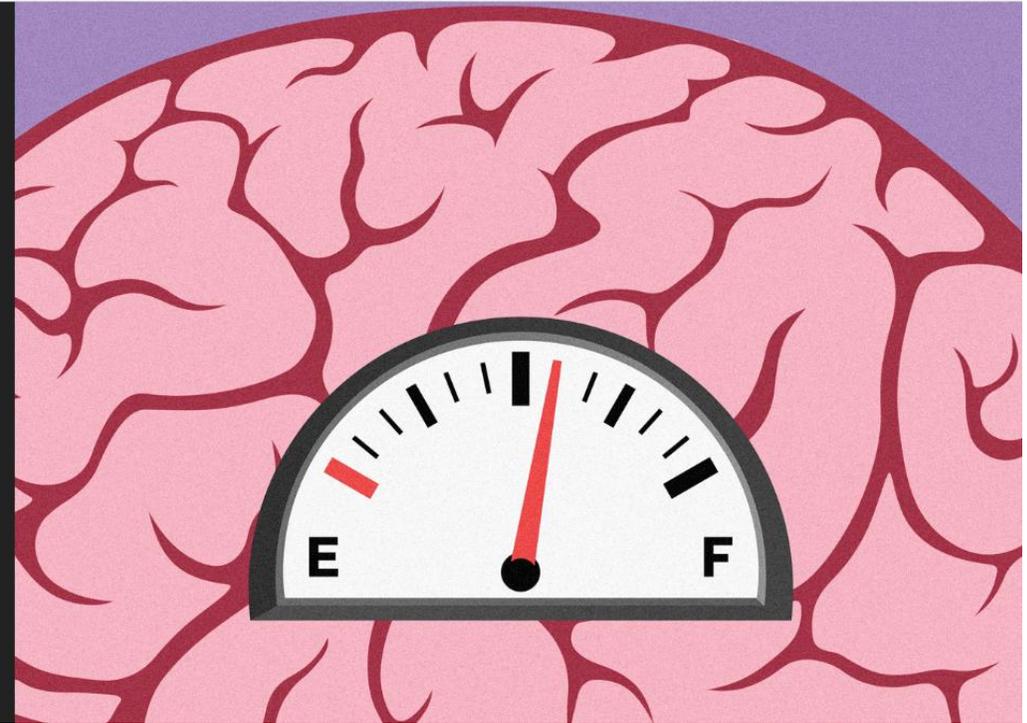
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Ozempic Settles the Obesity Debate: It's Biology Over Willpower

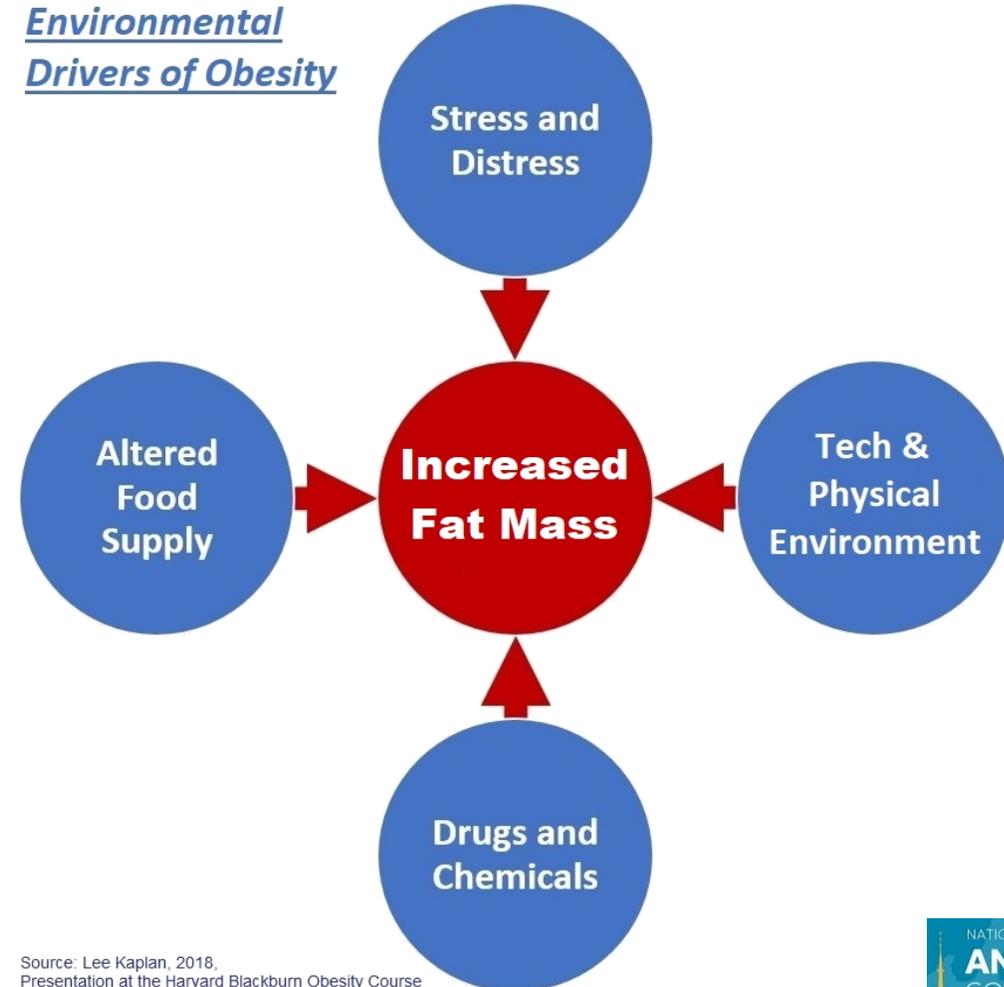
Weight-loss drugs affect the brain in ways that help researchers understand how the body regulates weight



Increasingly People Understand Multiple Factors Are Driving Obesity

Multiple factors are driving obesity rates

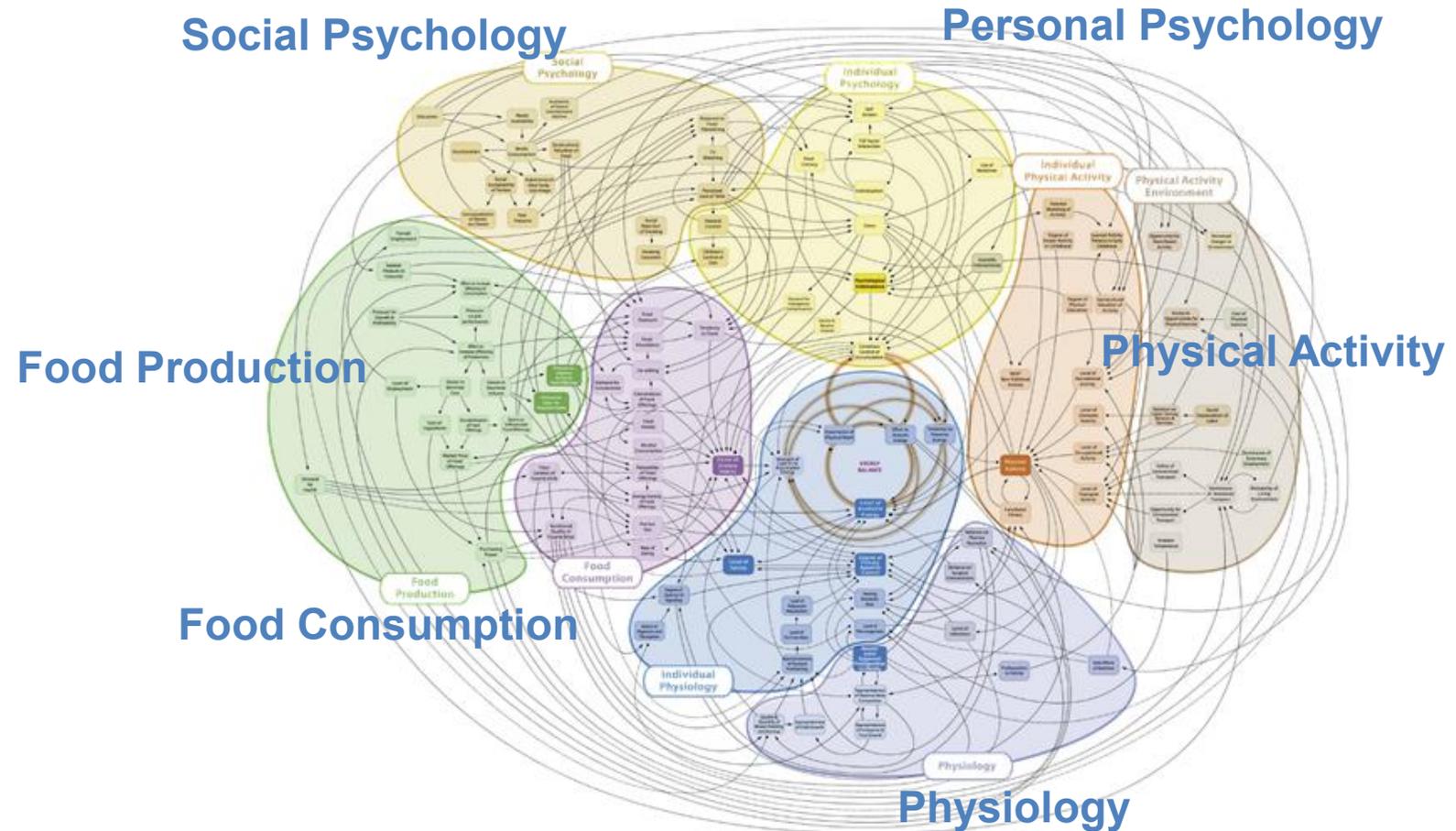
Environmental Drivers of Obesity



Source: Lee Kaplan, 2018,
Presentation at the Harvard Blackburn Obesity Course

Increasingly People Understand Multiple Factors Are Driving Obesity

Those factors interact with complex adaptive systems to drive obesity rates



Barriers to Obesity Care Are Fading As Understanding of Obesity Grows



Obesity Research & Clinical Practice

Volume 18, Issue 2, March–April 2024, Pages 94-100



Benefits managers' attitudes toward
obesity treatment coverage

“Findings suggest that understanding obesity as a condition caused by biological factors as opposed to personal responsibility and behavior is associated with greater support for coverage of all its treatments..”

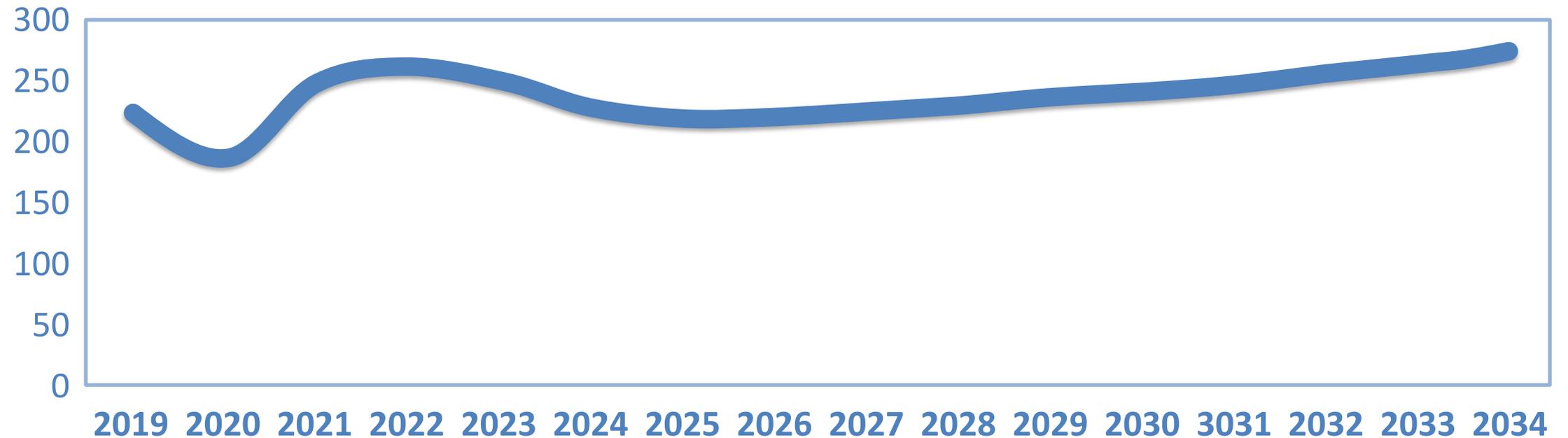
Where Does All This Lead?
**Implications for
Metabolic Surgery**



The Giant Racer, painting by Cyril Power / WikiArt

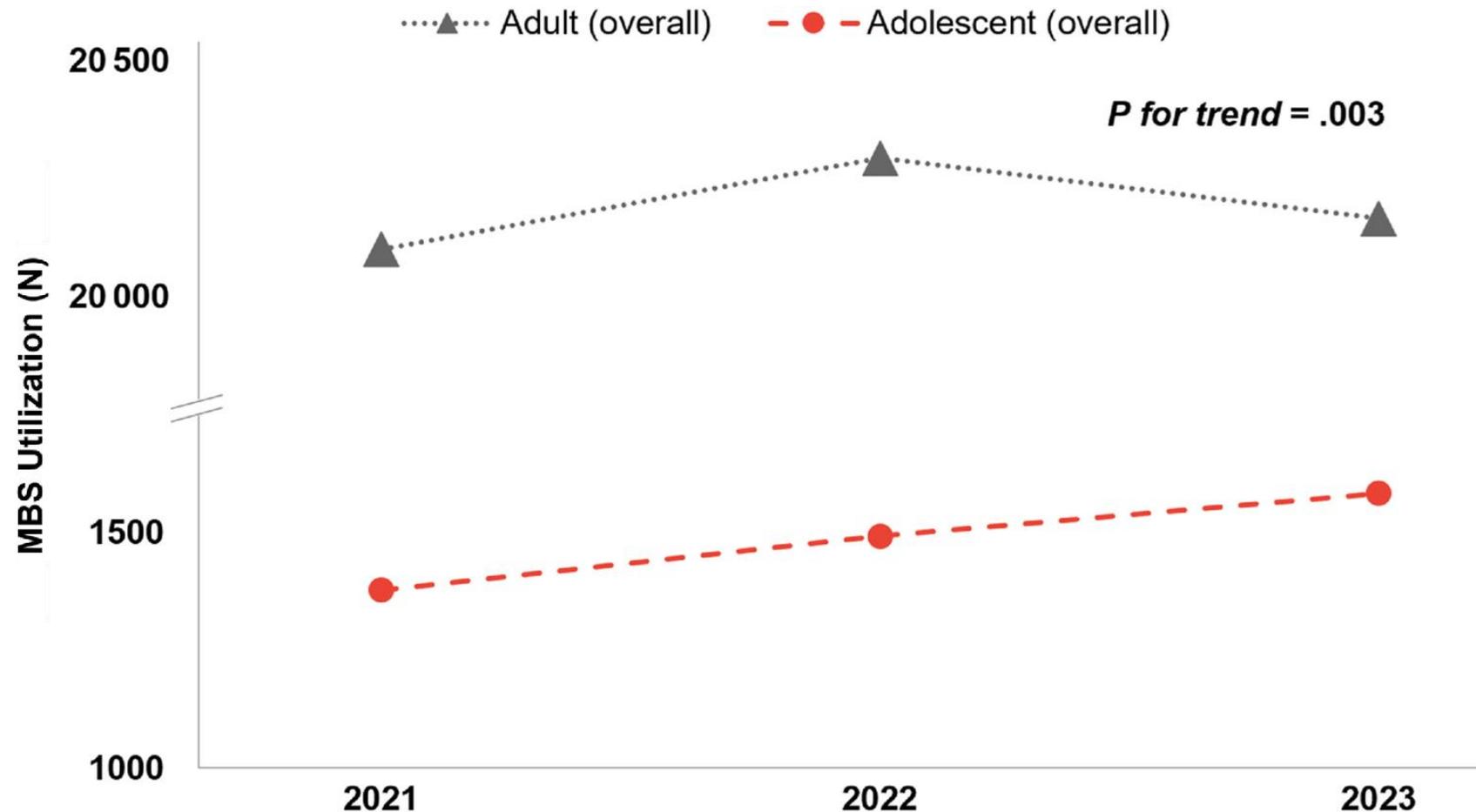
The GLP-1 Effect on Metabolic Surgery Volumes Is Playing Out

Estimates of Total U.S. Metabolic Surgery Procedures

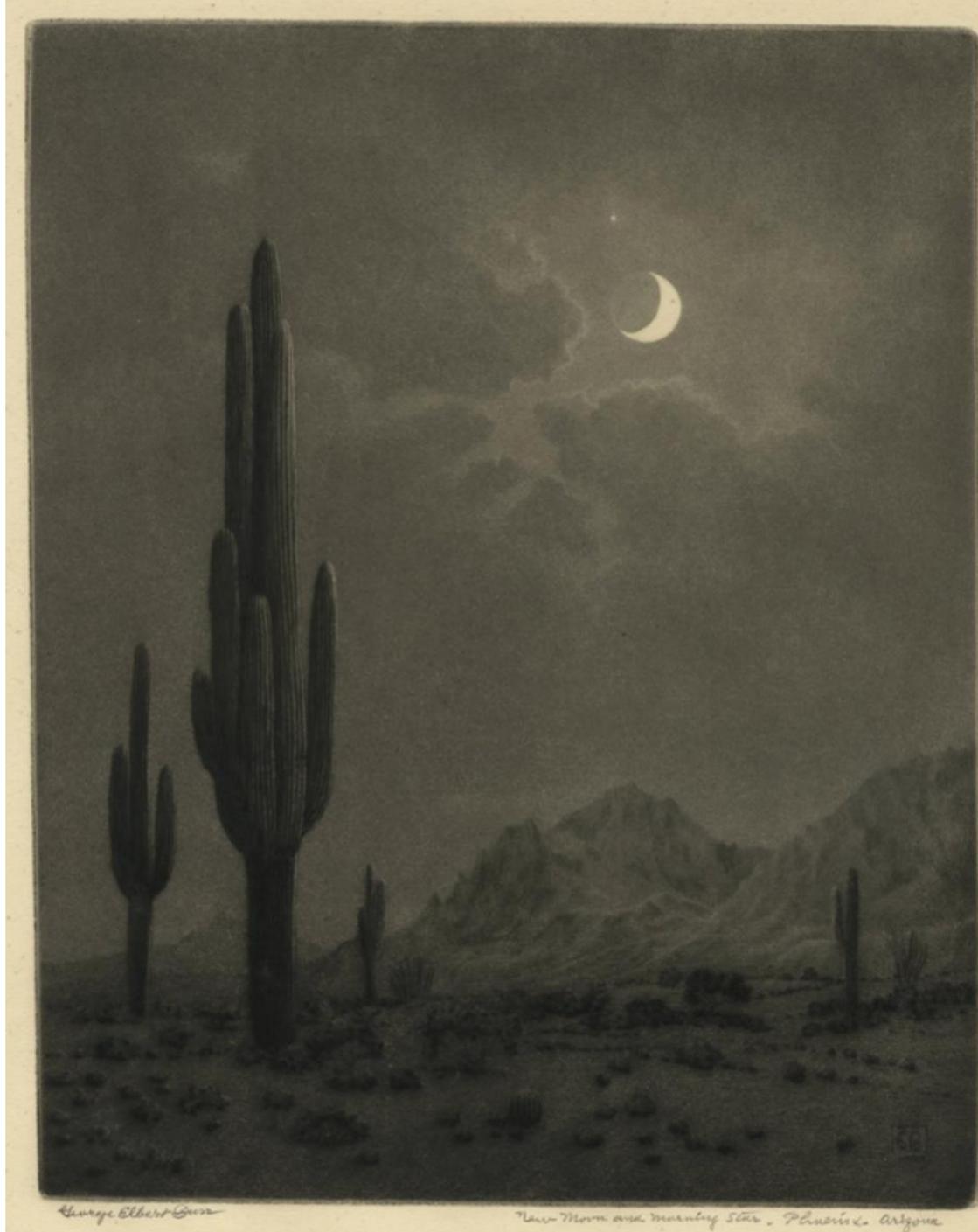


Estimates from a Clarivate analysis presented July 2025 online at <https://clarivate.com/life-sciences-healthcare/webinars/the-impact-of-glp-1ras-on-bariatric-surgery/>

Metabolic Surgery for Adolescents Is Growing



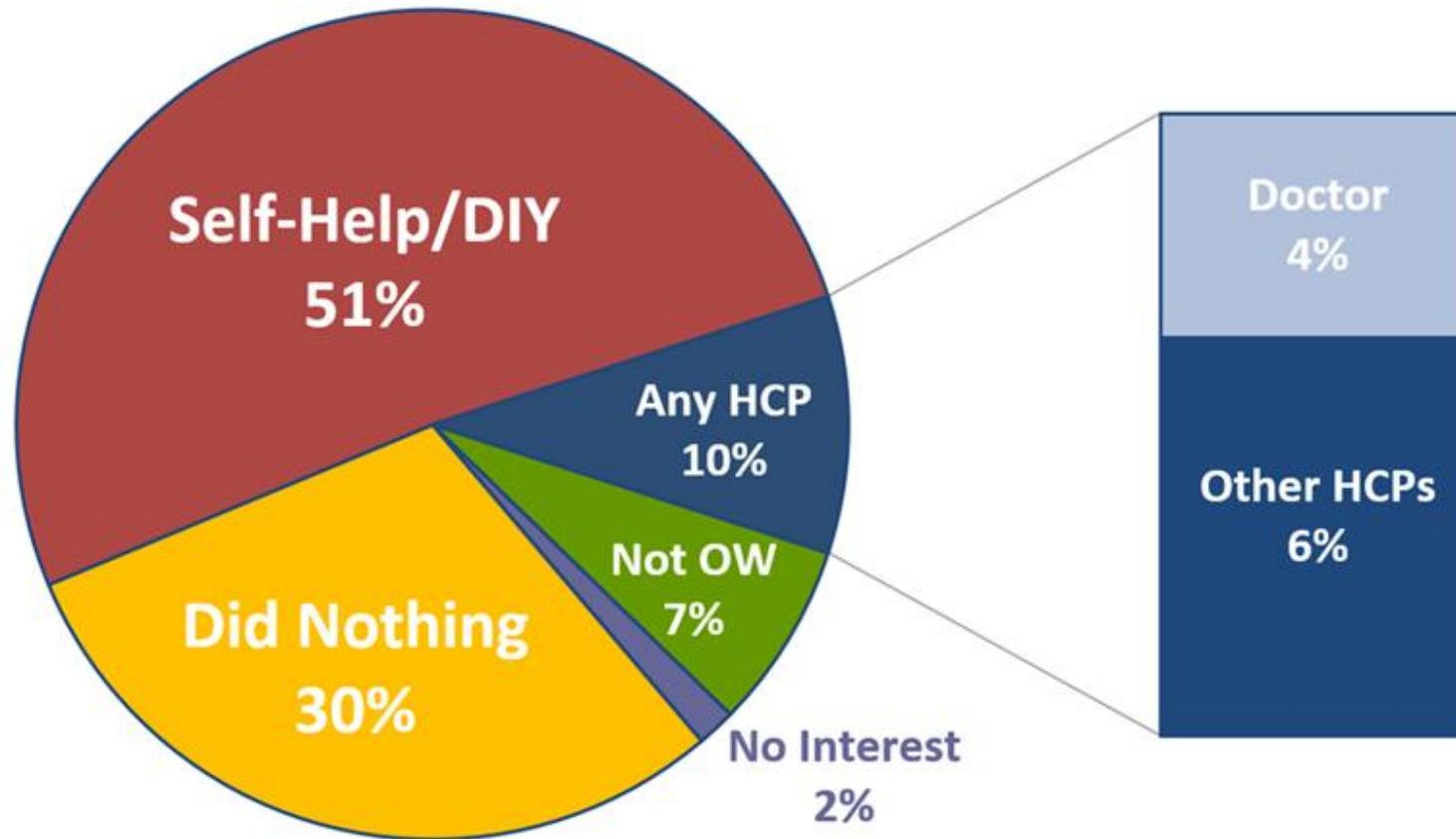
**But Only a Tiny
Sliver of People
Who Could Benefit
from Surgery
Receive It**



New Moon and Morning Star, Phoenix, Arizona, Etching by George Elbert Burr / WikiArt

2012:

Few Patients See Health Professionals for Obesity



2014:

Metabolic Surgery Seen as Too Risky

- Only 32% with class III obesity would even consider surgery
- Most often because they considered it too risky
- Minimization of their own health risks seems to be a factor, too

Brief Cutting Edge Report

CLINICAL TRIALS: BEHAVIOR, PHARMACOTHERAPY, DEVICES, SURGERY

Obesity

The Influence of an Individual's Weight Perception on the Acceptance of Bariatric Surgery

Fatima Cody Stanford¹, Theodore K. Kyle^{2,3}, Mechelle D. Claridy⁴, Joseph F. Nadglowski³, and Caroline M. Apovian⁵

Objective: This study assessed the proportion of US adults with excess weight and obesity who consider bariatric surgery to be appropriate for themselves and how their own weight perception influences this consideration.

Methods: A stratified sample of 920 US adults in June 2014 was obtained through an online survey. The respondents were queried about bariatric surgery acceptability and personal weight perception. Average body mass index (BMI) was determined for each demographic variable, and responses were characterized according to BMI and concordance with perceived weight status. Chi-square analyses served to assess perceived weight concordance in relation to bariatric acceptance.

Results: Only 32% of respondents with Class III obesity indicated that bariatric surgery would be an acceptable option for them, most often because they considered it to be too risky. Respondents with Class III obesity and concordant perception of weight status were more likely ($P < 0.03$) than discordant Class III respondents to accept bariatric surgery. Likewise, concordant respondents with excess weight, but not obesity, were more likely ($P < 0.001$) to correctly consider bariatric surgery to be inappropriate for them.

Conclusions: Despite good safety and efficacy, many persons still believe bariatric surgery is too risky. Weight perception concordance or discordance influences one's decision to consider this treatment option.

Obesity (2014) 00, 1–5. doi:10.1002/oby.20968

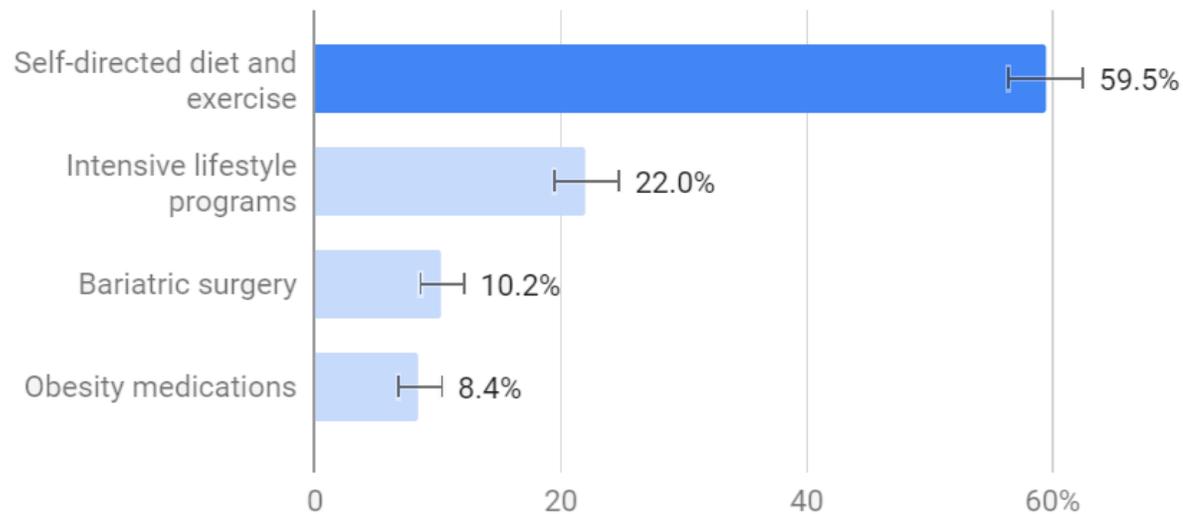
2019 Research

Unrealistic Expectations for Obesity Self-Help

Obesity Treatments - U.K.

1. Which of the following treatments for obesity is most effective?

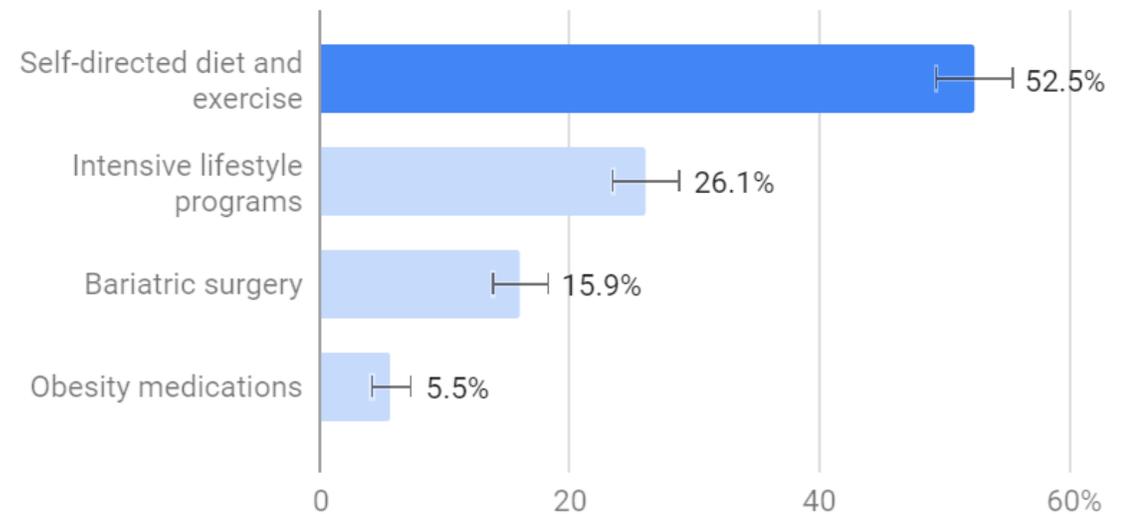
766 respondents



Obesity Treatments - U.S.

1. Which of the following treatments for obesity is most effective?

776 respondents

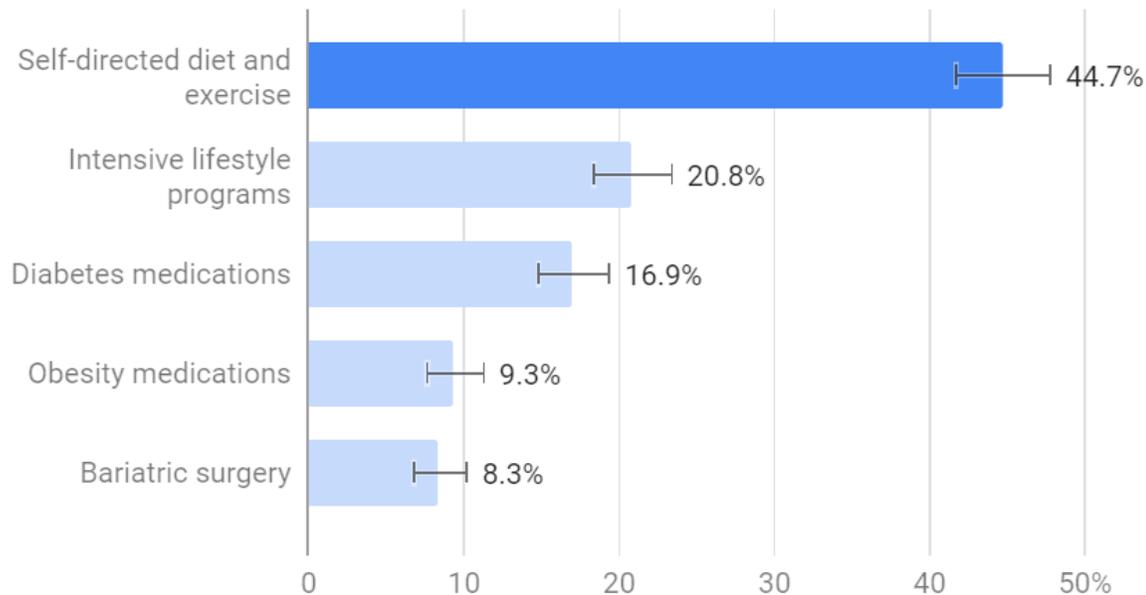


2019 Research: Similarly Unrealistic Expectations for Diabetes

Diabetes Treatments - U.K.

1. Which of the following treatments for type 2 diabetes is most effective in people who also have obesity?

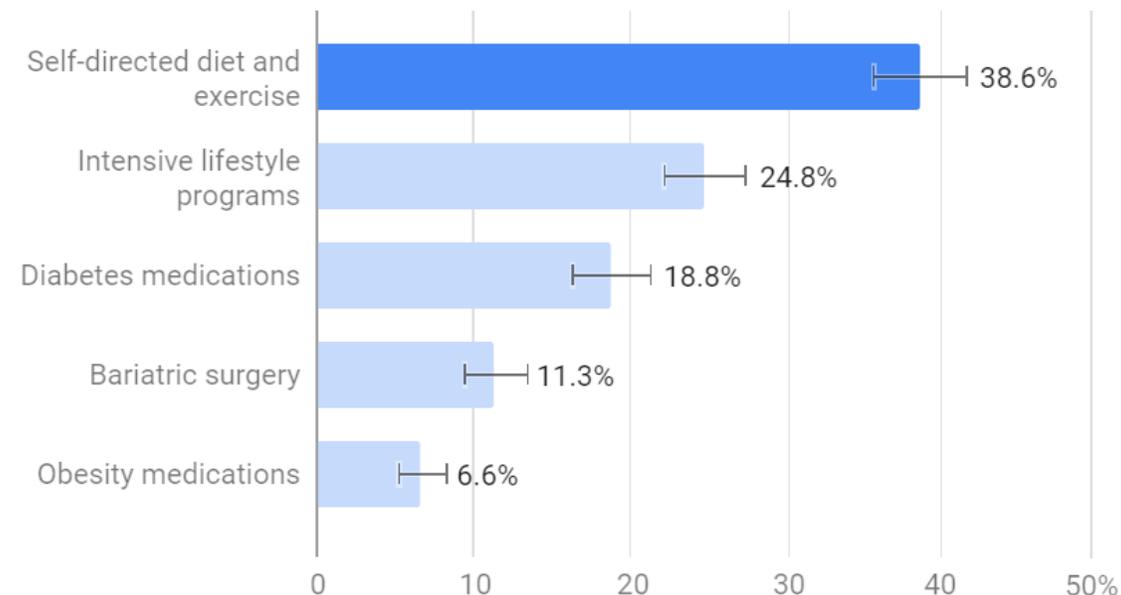
754 respondents



Diabetes Treatments - U.S.

1. Which of the following treatments for type 2 diabetes is most effective in people who also have obesity?

728 respondents



July 2023

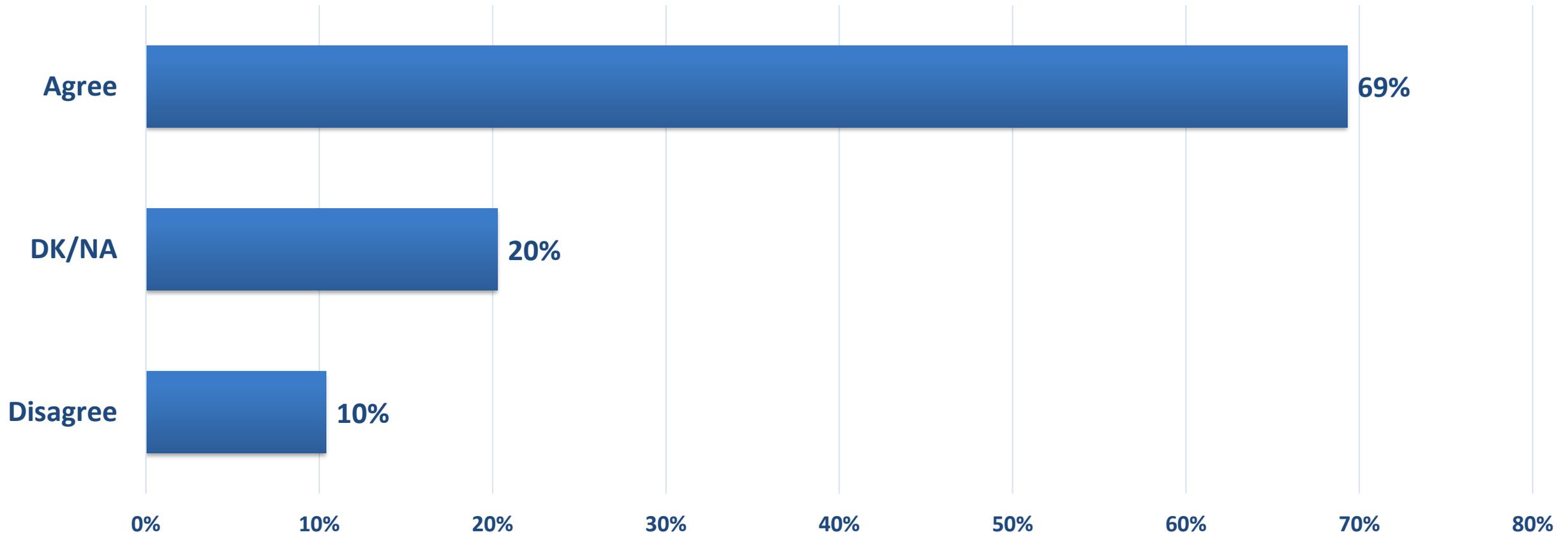
KFF Health Tracking Poll

- 45% of adults express interest in new obesity medicines
- More than two-thirds of those say “no thanks” to chronic therapy
- Injections and insurance are barriers, too

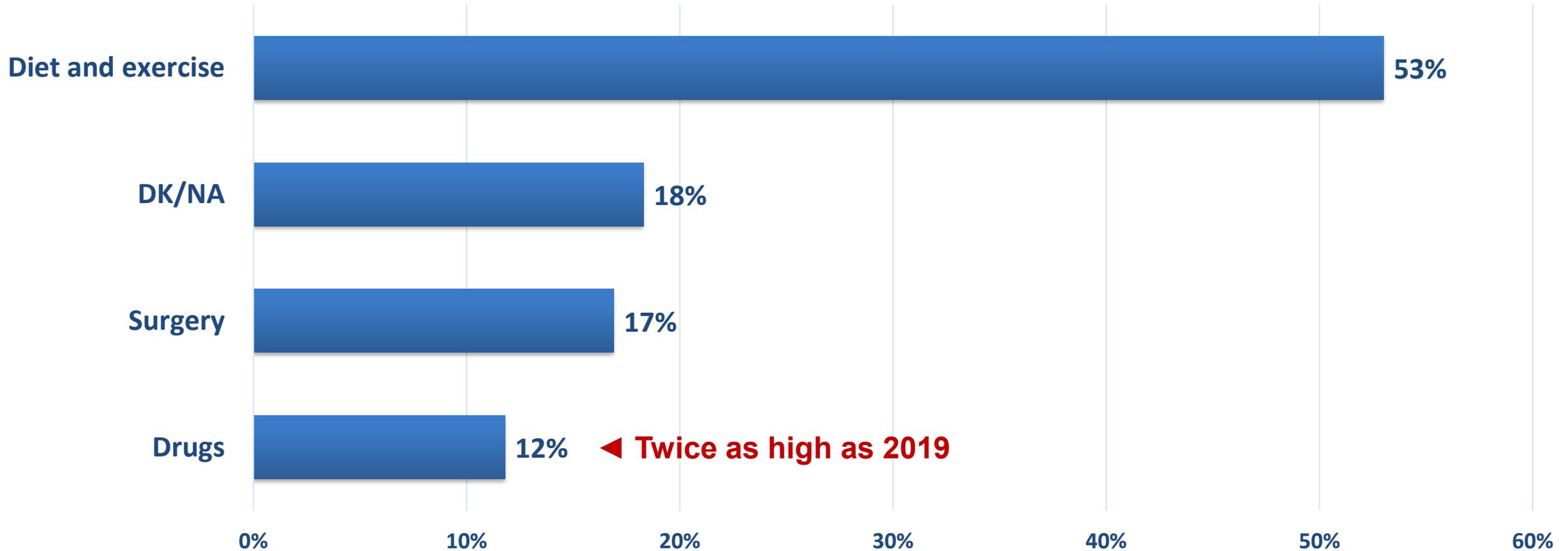


More People Agree: The Biology of Obesity Is Important

“There is strong evidence that body weight is regulated by a biological mechanism, not just by willpower”

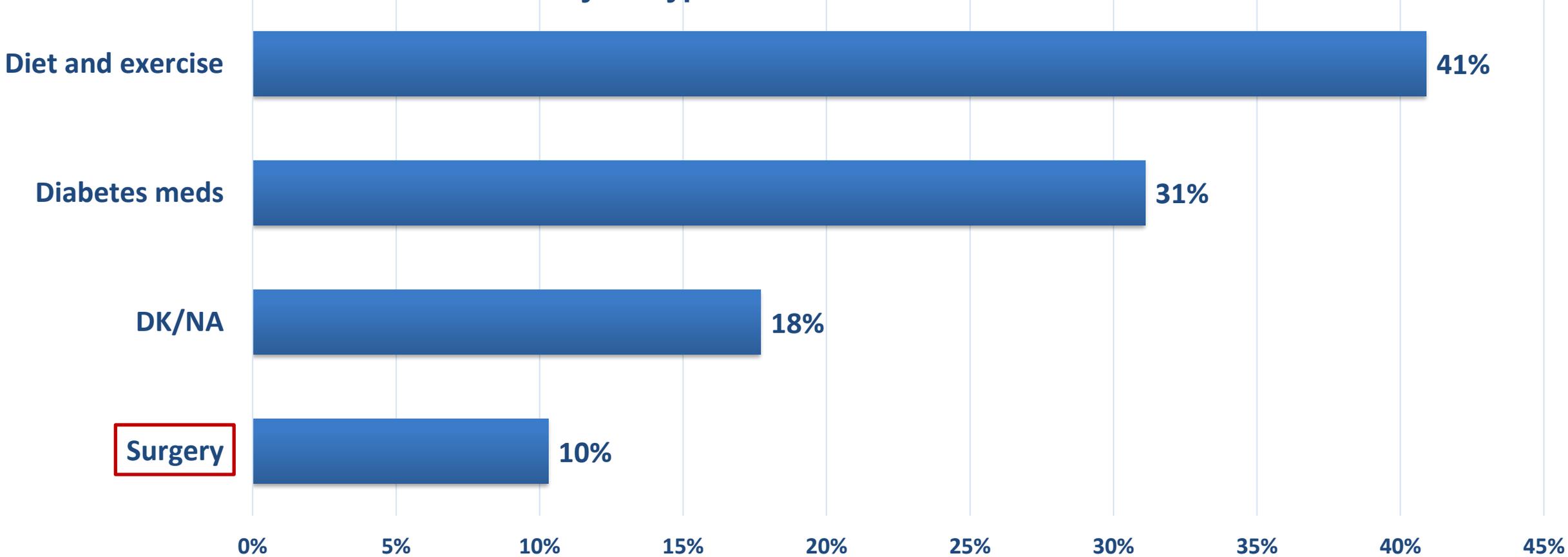


Views of Obesity Meds Seem to Be Shifting Favorably



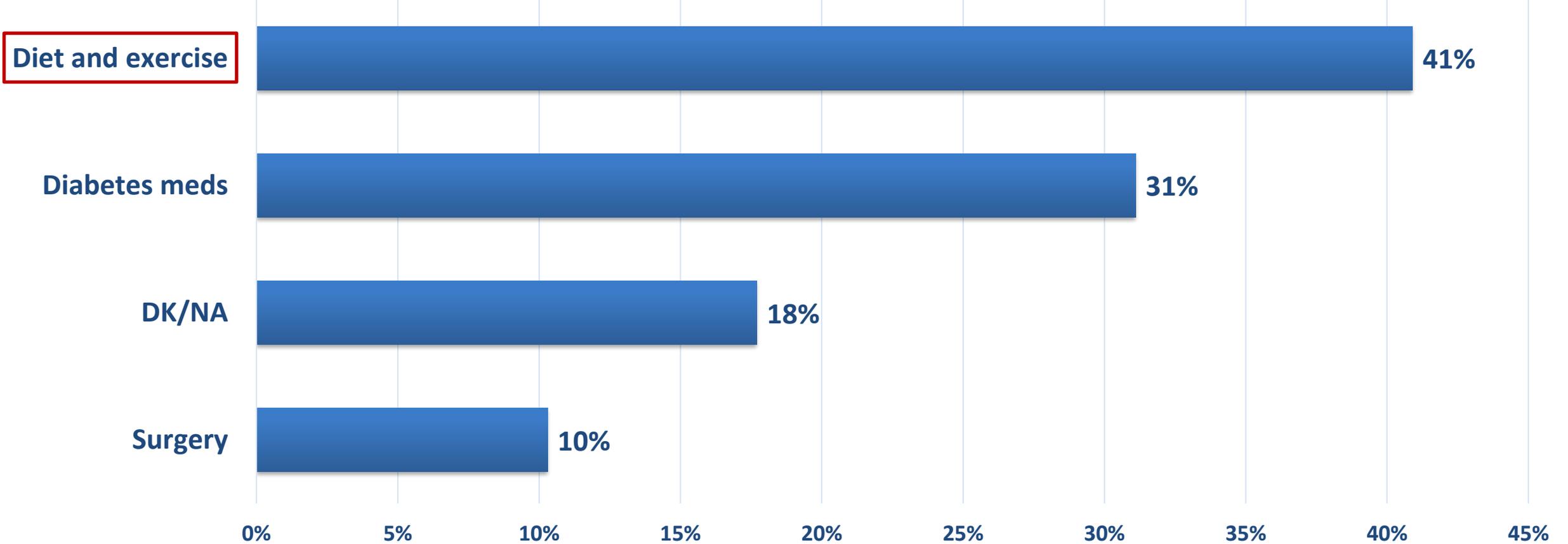
Poor Understanding of Evidence Favoring Surgery

“What is most effective treatment today for type 2 diabetes?”



But People Still Have High Expectations for Diet and Exercise

“What is most effective treatment today for type 2 diabetes?”



Positioning Medical Versus Surgical Obesity Care as a Zero Sum Is a Dead-End



Which Is More Effective for Weight Loss, GLP-1 Drugs or Surgery? New Study Has Answer

When researchers analyzed weight loss results from patients who took GLP-1 drugs and those who'd undergone bariatric surgery, one method led to much more weight loss.

Building Scale for Comprehensive Obesity Care Will Define the Future

ConscienHealth™
Consumers · Science · Better Health



ENDO2025: A Fresh View of Medical and Surgical Obesity Care

At [ENDO2025](#) Saturday, we got a fresh view of the future that lies ahead for medical and surgical obesity care. In a sharp contrast to *either/or* constructs that pit medical and surgical care as rivals, endocrinology fellow Angela Rao presented data pointing to complementary roles for medical and surgical obesity care.

[Bariatric Surgical Practice and Patient Care](#) > [Vol. 18, No. 2](#)

Research Article | [FREE ACCESS](#) | Published Online: 15 June 2023

Building a Medical–Surgical Obesity Center in an Academic Health System: Lessons Learned

Authors: [Laura Davisson](#)  , [Trea Haggerty](#), [Lawrence Tabone](#), [Riley Imlay](#), and [Emma Eggleston](#) | [AUTHORS INFO & AFFILIATIONS](#)

Publication: Bariatric Surgical Practice and Patient Care

<https://doi.org/10.1089/bari.2022.0028>

Building Scale for Comprehensive Obesity Care Will Define the Future



- Integration into primary care
- Telehealth models
- Comprehensive centers with integrated behavioral, medical, and surgical care providers

Photograph © Obesity Action Coalition / OAC Image Gallery

In Summary

Some Things Are Changing Greatly

- Lived experience more visible
- More options for obesity care
- Shifting dietary behaviors
- Food market dynamics
- Pressure on health systems
- Fading explicit bias
- Growing understanding of obesity



Farm Woman, painting by Pablo Picasso / WikiArt

Some Sticking Points Remain

- Persistent implicit bias
- Inequitable access to care
- Low utilization of surgery
- Inadequate systems for delivering obesity care at scale
- Room to grow for comprehensive, chronic obesity Care



Farm Woman, painting by Pablo Picasso / WikiArt

More Information

 conscienhealth.org/news

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