

Clinician Update

Weight Management

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Reducing CV risk in obesity: **The life-saving strategies that really work**

Research confirms which options can guard against heart attack, stroke and other CV events in people with overweight/obesity. Here, experts explain how to implement these evidence-based therapies into clinical practice.

For patients with obesity, managing cardiovascular (CV) risk means treating their excess weight in addition to controlling traditional risk factors like high LDL cholesterol. And the stakes have never been higher: Obesity prevalence has risen over the last two decades, and deaths from obesity-related cardiovascular disease (CVD) have tripled.¹

Fortunately, research is uncovering options to help clinicians stem this deadly tide. Recent data suggest a direct link between treating overweight/obesity and lowering the risk of major cardiovascular events (MACE)²—providing powerful evidence that targeting overweight and obesity saves lives. “The link between obesity and CV risk has always been clear, but until now, we just haven’t had the evidence that treating obesity with medications would decrease CV events,” says Melanie Jay, MD, MS, internist and professor of Medicine and Population Health at the New York University Grossman School of Medicine in New York City. Experts say clinicians should assume that any patient who presents with overweight/obesity requires intervention for CV risk. They recommend that clinicians do the following:

Medication is frequently a necessary adjunct to diet and exercise in treating overweight/obesity. Ken Fujioka, MD, clinical professor of Medicine and director of the Nutrition and Metabolic Research Center at Scripps Clinic in San Diego, CA, recommends offering a GLP-1 RA early in the treatment course. But first, he says

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the patient should be thoroughly educated on how a GLP-1 RA works as part of a shared decision-making process. “When starting a GLP-1 RA, you need to find out if the patient has been misinformed,” Dr. Fujioka cautions. “There’s so much on social media about GLP-1 RAs; you hear everything from, ‘This is the magic drug’ to ‘This is the devil’s handiwork.’”

Along with the proven CV benefits of weight loss, in patients with diabetes,^{3,4} findings from

a randomized, controlled clinical trial showed a certain GLP-1 RA reduced MACE risk in patients with CVD and overweight or obesity—regardless of type 2 diabetes status and other comorbidities.²

This led to the first-ever obesity agent receiving FDA approval for CV risk reduction. Specifically, the SELECT trial enrolled 17,604 patients 45 and older with a BMI of 27 kg/m² and preexisting CV disease but without type 2 diabetes. Participants

received a GLP-1 RA or placebo over a mean 34-month interval. After about 4 years of follow-up, the composite risk of CV death, nonfatal myocardial infarction or nonfatal stroke was 20% lower in the therapy group compared with the placebo group.²

What’s particularly interesting about the trial is that participants were already following aggressive secondary CV prevention regimens with statins, platelet-aggregation inhibitors,



“The minute your patient has prediabetes, that patient is at high risk for cardiovascular disease.”

—Ken Fujioka, MD



ACE inhibitors, beta-blockers and/or angiotensin receptor blockers.² This suggests the added CV benefit of a GLP-1 RA could be significant. “To do this study in people without diabetes and show that they did better than the placebo group is impressive,” says Dr. Fujioka.

Educate patients on potential side effects

Before initiating therapy with any GLP-1 RA, it's crucial to instruct patients on common side effects and how to mitigate them. First, review the potential for nausea, vomiting and constipation. “GI effects with GLP-1 RAs are a given, especially when patients first start the medication or titrate to higher doses,” Dr. Jay says. “I tell patients, ‘You’ll have to eat smaller meals and avoid fatty or spicy foods.’ I’ve had patients who can’t tolerate the medication because they were unable to stop eating fast food or big meals, which can make them sick on these medications.” For constipation, advise patients to add fiber to their diet, stay hydrated and take a stool softener.

Substantial weight loss with a GLP-1 RA may also decrease lean tissue as well as fat tissue, so Dr. Fujioka urges his patients to do resistance training to preserve muscle mass. “When somebody loses 4 pounds, usually about 1 pound will be lean tissue,” Dr. Fujioka says. “Exercise can dramatically lower that ratio, and this is important, particularly for elderly patients who don’t have as much lean tissue as younger adults.”

Finally, for patients who cannot take a GLP-1 RA, combination phentermine/topiramate, combination naltrexone/bupropion and orlistat may be viable

alternatives depending on patient characteristics and concurrent medications, Dr. Jay notes. Increased HDL cholesterol and reduced triglycerides concurrent with weight loss have been reported with all three agents.⁵

Counsel on lifestyle changes—and set them up for success

Lifestyle interventions are another major component of weight loss and reducing CV risk, experts stress. Dietary and behavior modifications can be a long journey, but here are practical starting points:

- **Set achievable goals.** “Find out what patients are doing and have them come up with goals for change,” says Dr. Jay, noting that this requires taking a thorough history and some probing. “Ask patients: ‘What did you eat yesterday?’ and ‘What do you eat in a typical day?’ If you find out they’re having 4 sugary sodas a day, that is one easy change that a patient can come up with by themselves.”
- **Recommend simple behavioral changes,** such as not eating after 7 PM. “People who eat past 9 PM change hormones in their brain and gut, and this will drive their weight up,” Dr. Fujioka adds.
- **Refer to a weight-loss program,** such as the National Diabetes Prevention Program or commercial programs such as Weight Watchers and Jenny Craig.

Treat dyslipidemia aggressively

Make sure any patient with overweight/obesity who has elevated

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For optimal results, address mental health

When treating people with overweight/obesity, be sure to review their mental health history and whether they are taking psychotropic medication, advises Ken Fujioka, MD, clinical professor of Medicine and director of the Nutrition and Metabolic Research Center at the Scripps Clinic in San Diego, CA. “Unfortunately, there are times when the practitioner has no choice and has to use a medication that is associated with weight gain,” he adds. “This is where the HCP needs to be empathetic and help with other options.” On the other hand, mental health problems can impact heart health and thwart weight-loss goals, so pay special attention to the following:

Anxiety.

Stress can increase the risk of both CVD and obesity, according to Melanie Jay, MD, MS, internist and professor of Medicine and Population Health at the New York University Grossman School of Medicine in New York City.⁹

Depression and other mood disorders.

Some medications used to treat these conditions can promote weight gain.¹⁰ “Monitor the patient’s weight and work with their mental health provider to choose a more weight-neutral agent, when possible,” Dr. Jay advises. Studies indicate that individuals with depression have a higher risk of developing CVD and experiencing adverse CV events compared to those without depression. Additionally, depression can exacerbate existing CV conditions and negatively impact outcomes.¹¹

Binge eating or other eating disorders.

Before starting any type of weight-loss therapy, including commercial programs, patients should be evaluated for eating disorders, Dr. Jay notes.



“Find out what patients are doing and have them come up with goals for change.”

—Melanie Jay, MD, MS

LDL cholesterol or a 7.5% risk of atherosclerotic CVD within 10 years is receiving, and adhering to, a statin or other cholesterol-lowering regimen.⁶ “I tell these patients, ‘You need this statin to increase your chances of reaching older age,’” Dr. Fujioka says. “But regular statin use does not mitigate the CV threat of overweight/obesity, so weight treatment still needs to be aggressive,” he adds.

Patients with normal LDL levels but low HDL and high triglycerides are also at elevated CV risk. “With low HDL and high triglycerides, I have to change my thinking because this is just as deadly as high LDL, but a statin won’t work,” Dr. Fujioka says. “Weight loss is the best treatment we know in this case, as it will improve this dyslipidemic picture.”



Maintain tight control of weight-related complications

Certain conditions that significantly raise CV risk are prevalent in people with overweight and obesity—and weight loss can improve all of them, along with other treatments as indicated. These include:⁶

- **Prediabetes and type 2 diabetes.** “Prediabetes and diabetes are a continuum,” Dr. Fujioka says. “The minute your patient has prediabetes, that patient is at high risk for cardiovascular disease.” He says the critical need to control dysglycemia with a comprehensive approach (e.g., diabetes education, healthy eating, increased physical activity, medication) cannot be overstated.
- **Metabolic dysfunction-associated steatotic liver disease (MASLD).** CVD is the leading cause of death among patients with MASLD, which is also common among patients with type 2 diabetes.⁷ Existence of MASLD with or without metabolic dysfunction-associated steatohepatitis (MASH) warrants aggressive weight management, Dr. Jay says.
- **Obstructive sleep apnea (OSA).** Untreated OSA spikes the risk of CVD, heart failure and arrhythmias.⁸ Although data have not shown a direct link between continuous positive airway pressure (CPAP) and MACE reduction, “It’s still helpful from a CV standpoint to ensure the patient’s sleep apnea is diagnosed and treated,” Dr. Jay says. ●

—by Pete Kelly

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Take the Journey to Better Thyroid Health

The path to a healthier you takes you on a journey of personal care. And for people who have (or suspect) a thyroid condition, that journey can be complex, emotional and often confusing. If you've been searching for answers, your next step should be on the AACE Journey for Patients with Thyroid Disease. Presented in easy-to-understand terms, the AACE Journey for Patients with Thyroid Disease is derived from clinical guidelines of the American Association of Clinical Endocrinology (AACE), reviewed by AACE experts, and helps you to navigate your path through understanding your condition, treatment options, and wellness goals.

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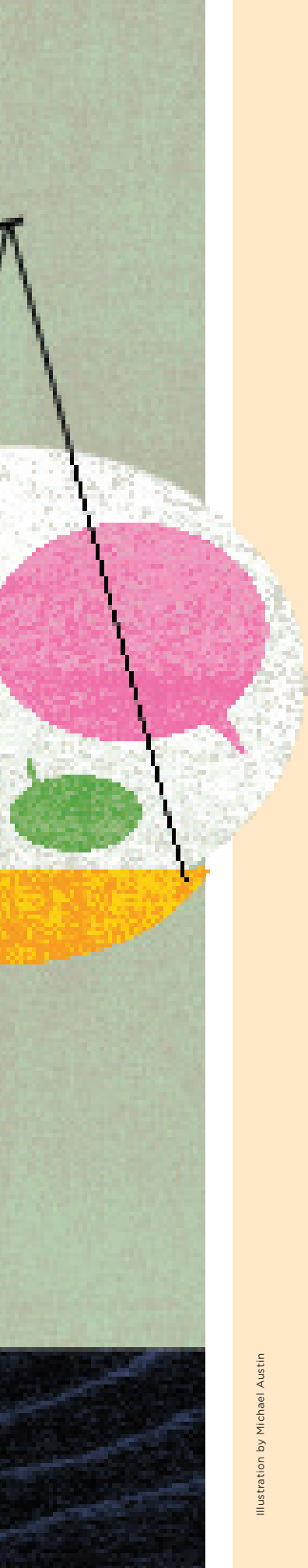
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The compassionate *“weigh-in”*

As routine as it may seem, asking patients to step on a scale at an appointment's outset can shut them down before the visit even begins. Here's how to get the data you need without triggering weight-stigma distress.

For many people with overweight and obesity, stepping on the scale at appointments can be emotionally fraught, with research showing it may even be a barrier to care. One study, for example, found that one-third of participants refused to be weighed by a physician or medical assistant because of the negative impact on their mental health and self-esteem.¹ According to some clinicians, asking patients for permission before weighing them fosters a type of compassionate care. “Weighing someone without consent may seem like a small thing, but it reinforces the power imbalance,” says Joanne Keefe, FNP, MPH, a nurse practitioner in New Mexico and assistant professor at Frontier Nursing University. “It can shut people down before the appointment even begins.”

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Yet many experts argue that taking a patient's weight is clinically necessary for developing a treatment plan. "While weight is an emotionally loaded, often stigmatizing word, we cannot technically establish the diagnosis of obesity without weighing a patient," says Thomas George Jr., DNP, CRNP, FNP-C, professor, Frontier Nursing University and Doctor of Nursing Practice at Wellspring Weight and Wellness in Shelley, ID.

The conundrum has prompted health care providers to rethink how weight can be measured without causing patient discomfort. Here, some alternatives to the traditional weigh-in.

Screen without shame

Weight stigma not only packs an emotional wallop, but it can also prevent patients from getting the care that they need. Studies show it can lead to reduced access to care, poorer adherence to treatment plans and even increased mortality

risk.^{2,3} Patients who are overweight may delay or even avoid preventive screenings due to fear of judgment and shame or because of past negative experiences.^{1,3} "Weight sits at the intersection of health, identity and shame," explains Angela Tran, DO, CEO & Founder of Med-Fit Medical Weight Loss in Denver, CO. "However, when we approach the issue of weight with curiosity and consent, we reframe the scale as a tool for partnership, not punishment."

Dr. Tran believes in collaborating with patients when having a discussion on weight. As an example, she says that simply "asking permission to weigh someone gives them a sense of agency. While it might feel like a small gesture, it can set the tone for a more respectful and inclusive interaction."

And while diagnosis is currently based on body mass index (BMI), "most providers in obesity medicine agree it's

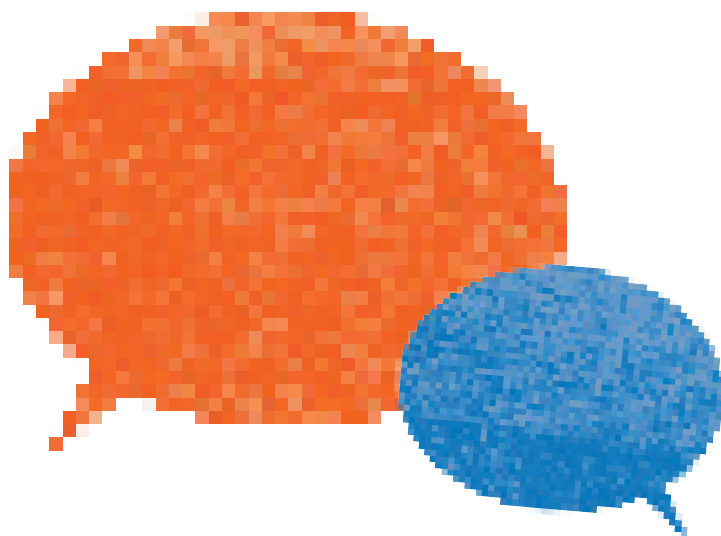
not always the best measure," points out George, who adds that this explains the trend toward also obtaining body composition. For this, he sometimes uses a dual-energy X-ray absorptiometry (DEXA) scan. While primarily known for bone-density testing, DEXA can also measure fat and lean tissue mass, making it a valuable tool for understanding obesity and its health implications.

"I ask our team not to measure weight until I've met with patients, earned their trust and asked them if it's okay to do a DEXA scan at that time," George says. "I don't do any tests until having a conversation about everything we are tracking, including body composition, waist circumference, VO₂ max and other vital signs."

Explain why they are being weighed

Most experts agree that weight needs to be addressed—not as a judgment but as a diagnostic tool. "Explain to patients that weight is a factor for medication dosing or to monitor treatment response," Dr. Tran says. "This way they won't feel like we're judging them—they'll know we're partnering with them."

Joanne Keefe, FNP, MPH, agrees, saying it's important to educate patients about risk factors associated with higher BMI, such as diabetes, dyslipidemia, CVD, MASLD, OA and sleep apnea. "Having data keeps the provider from making a judgment based on appearance," she says. "Let the patient know that weight is one of the datapoints that will help us assess for these diseases and determine how to mitigate them."



Change the focus from pounds to health

Another way to avoid weight stigma is to emphasize health over the numbers on the scale. “It’s not about chasing a number,” Dr. Tran says. “Some patients may be metabolically healthy despite being overweight, while others at a normal weight may have insulin resistance or poor cardiovascular health.” Dr. Tran adds that concentrating on health means looking at lab results, physical function and mental well-being. George agrees: “Obesity isn’t just about weight—it’s about how the body metabolically adapts,” he says. “If you focus too much on pounds, you risk missing the real picture.” To take a “whole-person” approach during visits with patients who have overweight or obesity, discuss weight in the context of overall physical and mental health and practice compassionate care, which involves identifying your own biases and practicing patient-centered communication (see below).⁴

Address stigma in your practice

Providers often assume patients lack discipline when it comes to losing weight. But Dr. Tran believes the opposite to be true. “My patients are usually the most disciplined people in the room,” she says. “They’ve tried every diet, they work out regularly and they’re still struggling. It’s not about willpower—let them know they can succeed with your help.”

Research has found both explicit and implicit biases among healthcare providers, includ-

ing nurses and nurse practitioners.⁵ Weight stigma is especially prevalent for women, with more than 50% of female patients saying they received inappropriate weight-related comments from their healthcare providers.⁵ As a result, women with obesity will delay screenings or avoid seeing doctors altogether despite being at higher risk for cancer and other weight-related conditions.^{6,7}

“There’s no room for stigma in the clinic office,” says Keefe. “All patients should be treated with respect, and they need to feel like they can explore options for better health outcomes,” she continues. “If I approach with kindness and curiosity, not criticism, patients, especially women, feel safer about opening up.”

Shape-shift your language and office

Experts say creating a shame-free environment usually starts with softer language and creating a more welcoming physical space. The goal is to shift emphasis from an external critique of weight and size to a partnership working toward health and wellness, according to the American Academy of Family Physicians (AAFP).⁴ To that end, clinicians should be mindful of the words they use to discuss weight with patients. Dr. Tran recommends using neutral terms like “weight management” instead of “weight loss” when appropriate. Words like “diet” or “exercise” can be replaced with more positive terms such as “nutritious food choices” and “physical activity.” Other off-putting terms to avoid are “morbidly obese” and “weight

problem.” It may be helpful to ask patients how they prefer you to refer to weight.

Experts say providers should also ensure that the office has inclusive seating, gowns and equipment. “We never place our scales in public places,” George says. “All weights and body compositions are done in private, behind closed doors.” During exams, Keefe says she discusses the health risks associated with weight with patience and empathy. “I tell patients: ‘I want to share some of the things I found during my exam that are risk factors. Let’s talk about each one and what we can do to decrease them.’” ●

—by Han-Gwon Lung

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“Weighing someone without consent may seem like a small thing, but it reinforces the power imbalance.”

—Joanne Keefe,
FNP, MPH

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Wegovy (semaglutide) injection 2.4mg is indicated in combination with a reduced-calorie diet and increased physical activity:

- to reduce the risk of major adverse cardiovascular events (stroke, acute coronary ischemic events, or nonfatal ischemic heart failure) in adults with established cardiovascular disease and either obesity or overweight
- to reduce excess body weight (BMI and/or excess weight) in long-term overweight and pediatric patients aged 12 years and older with obesity and adults with overweight in the presence of diabetes and weight-related comorbidity

Limitations of Use: Wegovy is contraindicated in pregnancy.

Concomitant use with other semaglutide-containing products or with any GLP-1 receptor agonists and/or insulin is not recommended.

Important Safety Information

WARNING: RISK OF THYROID C-CELL TUMORS

- In rodents, semaglutide causes dose-dependent and treatment duration-dependent thyroid C-cell tumors not arising by relevant mechanisms. It is unknown whether Wegovy® causes thyroid C-cell tumors. In that regard, long-term rodent carcinogenicity (MTC) is the only known adverse effect of semaglutide that could indicate thyroid C-cell tumors that has been observed.
- Wegovy is contraindicated in patients with a personal or family history of MTC or in patients with Multiple Endocrine Neoplasia syndrome type 2 (MEN 2). Current patients should be at the greatest risk for MTC with the use of Wegovy®. MEN 2A is characterized by the presence of at least 2 of the following: pheochromocytoma, parathyroid adenoma, or medullary thyroid carcinoma. Routine monitoring of serum calcitonin or using thyroid ultrasound or ultrasound value for early detection of MTC in patients treated with Wegovy®.

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- **Acute Kidney Injury or Chronic Kidney Disease:** There were no clinically significant changes in renal function or renal function in patients with a baseline eGFR of 30 mL/min/1.73 m² or higher. The incidence of acute kidney injury and chronic kidney disease in Wegovy®-treated patients aged 12 years and older during Wegovy® studies, including adults in adult patients, was 0.1% and 0.1%, respectively. In adult patients, the incidence was 0.1% of Wegovy® patients and 0.1% of placebo patients. Chronic kidney disease was reported by 0.1% of Wegovy® patients and 0.1% of placebo patients. In a clinical trial in pediatric patients aged 12 years and older, the incidence was 0.1% of Wegovy® patients and 0.1% of placebo patients. Chronic kidney disease was reported by 0.1% of Wegovy® patients and 0.1% of placebo patients. Kidney function in adult patients was not monitored. In that regard, it is unknown whether the risk of chronic kidney disease, including acute kidney injury, is greater in Wegovy® patients than in placebo patients, even after accounting for the degree of overweight. If chronic kidney disease is suspected, guidelines for acute and appropriate clinical follow-up are indicated.
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Table 2 | Overlaps with obesity (BMI ≥ 30 kg/m²) or overweight (BMI ≥ 25 kg/m²), adverse change in body weight at 2 years, baseline (2010/11) prevalence, $\geq 20\%$ for the prevalence, and BMI (kg/m²) (N=100), number and % of: 1) 10–19 kg/m² vs. 2.0 kg/m² and 2) 20–29 kg/m² vs. 2.0 kg/m² and 3 years 1) 10–19 kg/m² vs. 2.0 kg/m² 2) 20–29 kg/m² vs. 2.0 kg/m² 3) 30–39 kg/m² vs. 2.0 kg/m² 4) 40–49 kg/m² vs. 2.0 kg/m² 5) 50–59 kg/m² vs. 2.0 kg/m² 6) 60–69 kg/m² vs. 2.0 kg/m² 7) 70–79 kg/m² vs. 2.0 kg/m² 8) 80–89 kg/m² vs. 2.0 kg/m² 9) 90–99 kg/m² vs. 2.0 kg/m² 10) 100–109 kg/m² vs. 2.0 kg/m² 11) 110–119 kg/m² vs. 2.0 kg/m² 12) 120–129 kg/m² vs. 2.0 kg/m² 13) 130–139 kg/m² vs. 2.0 kg/m² 14) 140–149 kg/m² vs. 2.0 kg/m² 15) 150–159 kg/m² vs. 2.0 kg/m² 16) 160–169 kg/m² vs. 2.0 kg/m² 17) 170–179 kg/m² vs. 2.0 kg/m² 18) 180–189 kg/m² vs. 2.0 kg/m² 19) 190–199 kg/m² vs. 2.0 kg/m² 20) 200–209 kg/m² vs. 2.0 kg/m² 21) 210–219 kg/m² vs. 2.0 kg/m² 22) 220–229 kg/m² vs. 2.0 kg/m² 23) 230–239 kg/m² vs. 2.0 kg/m² 24) 240–249 kg/m² vs. 2.0 kg/m² 25) 250–259 kg/m² vs. 2.0 kg/m² 26) 260–269 kg/m² vs. 2.0 kg/m² 27) 270–279 kg/m² vs. 2.0 kg/m² 28) 280–289 kg/m² vs. 2.0 kg/m² 29) 290–299 kg/m² vs. 2.0 kg/m² 30) 300–309 kg/m² vs. 2.0 kg/m² 31) 310–319 kg/m² vs. 2.0 kg/m² 32) 320–329 kg/m² vs. 2.0 kg/m² 33) 330–339 kg/m² vs. 2.0 kg/m² 34) 340–349 kg/m² vs. 2.0 kg/m² 35) 350–359 kg/m² vs. 2.0 kg/m² 36) 360–369 kg/m² vs. 2.0 kg/m² 37) 370–379 kg/m² vs. 2.0 kg/m² 38) 380–389 kg/m² vs. 2.0 kg/m² 39) 390–399 kg/m² vs. 2.0 kg/m² 40) 400–409 kg/m² vs. 2.0 kg/m² 41) 410–419 kg/m² vs. 2.0 kg/m² 42) 420–429 kg/m² vs. 2.0 kg/m² 43) 430–439 kg/m² vs. 2.0 kg/m² 44) 440–449 kg/m² vs. 2.0 kg/m² 45) 450–459 kg/m² vs. 2.0 kg/m² 46) 460–469 kg/m² vs. 2.0 kg/m² 47) 470–479 kg/m² vs. 2.0 kg/m² 48) 480–489 kg/m² vs. 2.0 kg/m² 49) 490–499 kg/m² vs. 2.0 kg/m² 50) 500–509 kg/m² vs. 2.0 kg/m² 51) 510–519 kg/m² vs. 2.0 kg/m² 52) 520–529 kg/m² vs. 2.0 kg/m² 53) 530–539 kg/m² vs. 2.0 kg/m² 54) 540–549 kg/m² vs. 2.0 kg/m² 55) 550–559 kg/m² vs. 2.0 kg/m² 56) 560–569 kg/m² vs. 2.0 kg/m² 57) 570–579 kg/m² vs. 2.0 kg/m² 58) 580–589 kg/m² vs. 2.0 kg/m² 59) 590–599 kg/m² vs. 2.0 kg/m² 60) 600–609 kg/m² vs. 2.0 kg/m² 61) 610–619 kg/m² vs. 2.0 kg/m² 62) 620–629 kg/m² vs. 2.0 kg/m² 63) 630–639 kg/m² vs. 2.0 kg/m² 64) 640–649 kg/m² vs. 2.0 kg/m² 65) 650–659 kg/m² vs. 2.0 kg/m² 66) 660–669 kg/m² vs. 2.0 kg/m² 67) 670–679 kg/m² vs. 2.0 kg/m² 68) 680–689 kg/m² vs. 2.0 kg/m² 69) 690–699 kg/m² vs. 2.0 kg/m² 70) 700–709 kg/m² vs. 2.0 kg/m² 71) 710–719 kg/m² vs. 2.0 kg/m² 72) 720–729 kg/m² vs. 2.0 kg/m² 73) 730–739 kg/m² vs. 2.0 kg/m² 74) 740–749 kg/m² vs. 2.0 kg/m² 75) 750–759 kg/m² vs. 2.0 kg/m² 76) 760–769 kg/m² vs. 2.0 kg/m² 77) 770–779 kg/m² vs. 2.0 kg/m² 78) 780–789 kg/m² vs. 2.0 kg/m² 79) 790–799 kg/m² vs. 2.0 kg/m² 80) 800–809 kg/m² vs. 2.0 kg/m² 81) 810–819 kg/m² vs. 2.0 kg/m² 82) 820–829 kg/m² vs. 2.0 kg/m² 83) 830–839 kg/m² vs. 2.0 kg/m² 84) 840–849 kg/m² vs. 2.0 kg/m² 85) 850–859 kg/m² vs. 2.0 kg/m² 86) 860–869 kg/m² vs. 2.0 kg/m² 87) 870–879 kg/m² vs. 2.0 kg/m² 88) 880–889 kg/m² vs. 2.0 kg/m² 89) 890–899 kg/m² vs. 2.0 kg/m² 90) 900–909 kg/m² vs. 2.0 kg/m² 91) 910–919 kg/m² vs. 2.0 kg/m² 92) 920–929 kg/m² vs. 2.0 kg/m² 93) 930–939 kg/m² vs. 2.0 kg/m² 94) 940–949 kg/m² vs. 2.0 kg/m² 95) 950–959 kg/m² vs. 2.0 kg/m² 96) 960–969 kg/m² vs. 2.0 kg/m² 97) 970–979 kg/m² vs. 2.0 kg/m² 98) 980–989 kg/m² vs. 2.0 kg/m² 99) 990–999 kg/m² vs. 2.0 kg/m² 100) 1000–1009 kg/m² vs. 2.0 kg/m² 101) 1010–1019 kg/m² vs. 2.0 kg/m² 102) 1020–1029 kg/m² vs. 2.0 kg/m² 103) 1030–1039 kg/m² vs. 2.0 kg/m² 104) 1040–1049 kg/m² vs. 2.0 kg/m² 105) 1050–1059 kg/m² vs. 2.0 kg/m² 106) 1060–1069 kg/m² vs. 2.0 kg/m² 107) 1070–1079 kg/m² vs. 2.0 kg/m² 108) 1080–1089 kg/m² vs. 2.0 kg/m² 109) 1090–10

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¹Values are data for only patients who had a follow-up visit at least once at week 126 (102 of 142) for "high" and/or at week 126 of 102 for "low" side arms.

• **How many times I read your book, how much I enjoyed it and how it made me feel.**

emphysema, a generalised weakness associated with fatigue,¹ if hypermobility restricts intake, distastefulness of fatigue,² loss of appetite, paroxysmal of sore, and muscular twill types, and symptoms resolve. The reader is a patient with a history of emphysema or osteoarthritis with no other GLE evidence noted.

• **Cholera:** In a trial of 100 patients with type 1 cholera, cholera toxin was isolated by 10% of healthy patients and 27% of patients with cholera. Rapid immunoreactive plasma control has been associated with a reduced risk of developing cholera toxinemia. Patients with a history of cholera toxinemia should be treated with the combination of cholera toxin and cholera toxin.

• **Human Ration Experiments:** Human volunteers in resting (heart rate of 70 to 100 beats per minute) spent water consumed in 100g/200g adult patients consumed this plantain in 100g/200g. Mean Weight of adult patients compared with plantain leaf and stems (changes from baseline of 10 to 100 gms (10 to 200 gms) and 10 gms to 100 gms (200 to 400 gms). In a clinical trial, the patients (patients aged 12 years and older) administered for 100g/200g water, more patients consumed 100g/200g (average) in patients (100 minutes) compared to 100g/200g (average) in 100g/200g (100g/200g). In other human trials of regular (average) and (average) patients in 100g/200g (average) (average) of a resting heart rate while consumed. The patients (average) in a clinical trial consumed in resting heart rate, 100g/200g (100g/200g).

• Detailed Information and Education: Detailed information and education were also reported to be critical to all study sites, with most parents/guardians, providers, and/or participants for diagnosis, sustained thoughts or behaviors, and/or symptoms/behaviors as critical or important. Consequently, 50% of participants who reported sustained thoughts or behaviors available to patients with a history of suicidal thoughts or actions sought education.

Postgraduate Awarded an Honorary General Assistant or Clerk
 Postgraduate Awarded an Honorary General Assistant or Clerk

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- The addition of Vagisoy[®] to patients treated with locally injected laser evaluated. When including Vagisoy[®], median reduction in size of most commonly treated lesions was 6.6 cm² (range 0.0 to 12.0 cm²) compared to 4.0 cm² (range 0.0 to 12.0 cm²) for laser alone.

• **Integrase** causes a copy of genetic material, as well as the potential to regulate expression of environmentally inducible and constitutive, transfer the effects of oral medications (environmentally induced) with **Integrase**.

Age Group	Percentage
18-24	18%
25-34	25%
35-44	22%
45-54	20%
55-64	18%
65-74	15%
75-84	12%
85+	10%

- **Drug name:** May cause confusion. When pregnancy is mentioned, clinicians think of **Wegovy**. Do not use **Wegovy** in patients at least 2 months before a planned conception.

● **Results:** In women, menopause status (hypoG⁺ or hypoG⁻) did not differ significantly (aged 12 years and 41 years) regarding the number of children, reproductive health, or partner. Postmenopausal women 42 years of age (menopausal with hypoG⁺) had greater incidences of rheumatoid arthritis, osteoporosis, hypertension, heart, and arthritis compared to the nulliparous women (hypoG⁺). There was no difference between the postmenopausal women (aged 41 years) and the nulliparous women (aged 12 years) in the incidence of osteoporosis. It should be noted that the increased risk of osteoporosis in nulliparous women was not observed in the menopause group.

- **Side effects:** In the cardiovascular studies, most patients aged 75 years and older reported more frequent palpitations and fatigue than patients aged 75 years and older taking placebo and patients aged 75 years and older taking placebo.

Please see the End Summary of Proceedings for a complete record of the proceedings on the following dates:

RESEARCH DESIGN AND METHODS: A cross-sectional study of 100 patients with HIV/AIDS was conducted in a tertiary care hospital in India. The study was approved by the Institutional Review Board. Data were collected from medical records and interviews with patients and their families. The study was conducted between January and March 2018.

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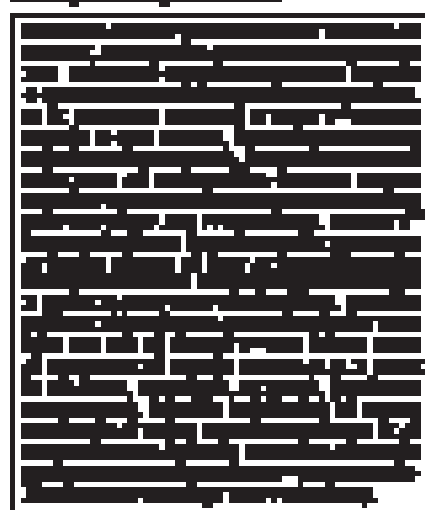


Figure 1 illustrates the relationship between Organizational Identity and Organizational Performance. The diagram shows a central box labeled 'Organizational Identity' at the top, connected by a double-headed arrow to a box labeled 'Organizational Performance' at the bottom. To the left of this central connection, there is a vertical stack of three boxes: 'Organizational Identity', 'Organizational Performance', and 'Organizational Identity'. Arrows point from the top 'Organizational Identity' box to the central 'Organizational Identity' box, and from the central 'Organizational Performance' box to the bottom 'Organizational Identity' box. The entire diagram is set against a background of horizontal lines.

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1. **Project Overview:**
 The project aims to develop a comprehensive system for managing the company's financial data, including budgeting, accounting, and reporting. The system will be designed to be user-friendly, secure, and scalable, allowing for easy integration with existing systems and future expansion.

2. **Objectives:**
 The primary objectives of this project are to:

Objective	Priority	Timeline
Develop a robust database structure for financial data storage.	High	Q3 2023
Implement core accounting modules (General Ledger, Accounts Payable, Accounts Receivable).	High	Q4 2023
Design and develop a user interface for budgeting and reporting.	Medium	Q1 2024
Integrate the system with existing ERP and CRM systems.	Medium	Q2 2024
Conduct thorough testing and validation of the system.	High	Q3 2024
Deploy the system to the production environment.	High	Q4 2024
Provide training and support for end-users.	Medium	Ongoing
Monitor system performance and user feedback.	Low	Ongoing
Plan for future system enhancements and upgrades.	Low	Ongoing

3. **Scope:**
 The project scope includes the development of the core financial management system, covering budgeting, accounting, and reporting modules. It also includes the integration with existing systems and the deployment of the system to the production environment.

4. **Stakeholders:**
 The project involves several key stakeholders, including the project sponsor, the steering committee, the project manager, the development team, the testing team, the deployment team, and the end-users.

5. **Risks:**
 The project faces several potential risks, including budget overruns, scope creep, delays in development and testing, and resistance to change from end-users.

6. **Conclusion:**
 This project is a critical initiative for the company, aimed at improving financial management and reporting. By successfully completing this project, the company will gain a more efficient and accurate financial system, enabling better decision-making and strategic planning. The project team is committed to delivering a high-quality system that meets the needs of the organization and its stakeholders.

7. **Next Steps:**
 The next steps in the project are to finalize the project charter, obtain approval from the steering committee, and begin the development of the database structure.

Task	Start Date	End Date
Finalize Project Charter	2023-07-01	2023-07-15
Obtain Steering Committee Approval	2023-07-15	2023-07-20
Begin Database Development	2023-07-20	2023-08-15
Design Accounting Modules	2023-08-15	2023-09-15
Develop User Interface	2023-09-15	2023-10-15
Integrate with Existing Systems	2023-10-15	2023-11-15
Conduct Testing	2023-11-15	2023-12-15
Deploy System	2023-12-15	2024-01-15
Provide Training	2024-01-15	2024-02-15
Monitor Performance	2024-02-15	Ongoing

8. **Appendix:**
 The appendix includes the following documents:

- Project Charter
- Steering Committee Charter
- Project Management Plan
- Database Design Document
- Accounting Module Design Document
- User Interface Design Document
- Integration Design Document
- Testing Plan
- Deployment Plan
- Training Plan
- Monitoring and Evaluation Plan

9. **References:**
 The project references the following documents:

- Company Financial Policy
- Accounting Standards (GAAP)
- ERP System User Manual
- CRM System User Manual
- Project Management Best Practices

the 1990s, the industry has been hit hard by a combination of factors. The most significant of these is the decline in the number of new entrants to the industry. This has been due to a variety of factors, including the high cost of entry, the need for specialized skills, and the lack of government support. In addition, the industry has been hit by a combination of factors, including the decline in the number of new entrants to the industry. This has been due to a variety of factors, including the high cost of entry, the need for specialized skills, and the lack of government support.

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PATIENT ENGAGEMENT

Overcoming barriers to care in rural communities

Evidence shows that obesity disproportionately affects rural populations, which are underserved due to geographic isolation, food insecurity and provider shortages. Here, experts offer tips for getting them the care they need.

Although rural America makes up a fraction of the total population, the prevalence of obesity is approximately six times higher than in urban America.¹ According to the CDC, this is due to higher rates of physical inactivity, poor eating behaviors and lack of access to endocrinologists and nutritionists.² “There’s no dietitian out here, and no physical therapist or diabetes educator who will drive out this far,” says Joanne Keefe, FNP, MPH, a nurse practitioner and assistant professor at Frontier Nursing University, who lives in rural New Mexico. Keefe says that healthcare providers like her frequently need to pick up the slack. “I take patients to the grocery store, where we read food labels together,” she says. “I also teach them to review menu labels for

unhealthy food choices.” Here, experts offer tips for closing the healthcare gap.

Adopt hybrid care models

The absence of endocrinologists and dietitians in rural areas puts pressure on local clinics to pick up the slack. To this end, experts say healthcare providers should actively look for ways to partner with regional resources or adopt hybrid care models that offer specialty-level care to

Continued on next page ►



patients without requiring them to travel long distances.

According to Keefe, hybrid models that combine in-person care with telehealth are essential for this population. “People simply do not get specialty care,” she says. “Patients won’t follow up if they have to drive three or four hours to an appointment—they can’t afford the expense or inconvenience.” She notes that telehealth visits, or even consultations by phone, have been highly effective for her low-income, older adult population with limited health literacy. “I have a patient who does all visits by phone, and it works.”

Keefe says Project ECHO (Extension for Community Healthcare Outcomes) offers a way to connect urban medical center disease experts with rural general practitioners and clinics through telehealth (*nhpco.org*). “Primary care providers learn directly from specialists, so patients receive a higher level of care without ever having to leave the community.”

Reframe the weight conversation

For many rural patients, obesity therapy can sometimes feel like a judgment rather than a health strategy. Experts say providers should be aware of weight stigma when discussing their treatment plans. “Shame doesn’t work—but understanding culture does,” says Thomas George Jr., DNP, CRNP, FNP-C, professor, Frontier Nursing University and Doctor of Nursing Practice at Wellspring Weight and Wellness in Shelley, ID. “Instead of focusing on what you can’t have, we talk about what we can keep—and how to modify it.”

Keefe teaches her patients how to swap traditional foods

for healthier options that they’re familiar with, such as choosing whole grain bread instead of white, flavored water instead of soda or olive oil in place of canola oil. She also helps patients review menus and brainstorm modifications. “If a hamburger is on the menu, I’ll suggest removing the top bun, or replacing it entirely with a lettuce wrap,” she says.

Address food access

For those who live in remote locations, the nearest grocery store might be 50 miles away, and many people live in food deserts—areas with limited supplies of fresh, affordable foods. Ironically, some food deserts are in areas where farming is important to the local economy. According to the U.S. Department of Agriculture Economic Research Service (USDA-ERS), these geographic barriers restrict the ability of rural Americans to purchase affordable, nutritious food—a key culprit behind rising rates of obesity and prediabetes.³

These patients often rely on small general stores for their weekly groceries—places where affordable, nutrient-dense foods are typically hard to find. “There are places that only have one store that serves the entire area,” Keefe explains. “If what they need isn’t there, they go without.” And George says that the “dollar store challenge” is real. At one conference he attended, he challenged providers to assemble a healthy meal using only ingredients from a local dollar store. He notes that discount stores carry staples like canned beans, plain rice, frozen vegetables, tortillas and cheese—ingredients that can be combined into healthy, affordable meals like stir fries or rice and beans.

“We need to teach our patients

how to navigate food options that are available to them,” Keefe says. Experts say that healthcare providers can help bridge this gap by:

- Compiling local store inventories to guide patients toward better choices
- Teaching label-reading during in-person visits, community workshops or telehealth sessions
- Referring patients to community-supported agriculture (CSA) programs, which allow residents to buy seasonal produce directly from local farmers. For CSA programs near you, go to localharvest.org/csa.

George says he likes to bring education into community spaces. He has coordinated with state parks and local farmers’ markets to host “walks with a provider” and group hikes, using these opportunities to build rapport with patients and introduce them to basic health principles.

Be a patient advocate

Experts say that patients from rural regions often distrust the healthcare system, so providers must act as navigators, educators and medical advocates. “The people I work with don’t think their doctor is telling them the truth,” Keefe says, “or they don’t understand what the clinician is saying.” She notices the disconnect when asked to accompany them on their doctor’s visits. “I explain the medical terms being said by the physician and add a cultural interpretation.”

When a doctor says a patient is “noncompliant,” for example, Keefe reframes it this way: “I explain that the provider just wants to understand what’s making it hard for them to stick with the

plan,” she says. George stresses the importance of building relationships with specialists, even if they’re far away. “I might not be able to send patients to an endocrinologist, but I can bring one here,” he says. “We’ll sometimes put them up in a hotel, and get them to meet with a dozen patients in a single visit.”

While not every clinic can host visiting specialists, primary care providers can reach out to regional endocrinologists or academic centers to propose periodic consultation days—either in person or via Zoom.

Individualize lifestyle changes

Lifestyle interventions remain the cornerstone of obesity treatment, with research showing that a 5%–10% reduction in weight achieved through diet and exercise can significantly reduce cardiovascular disease risk.⁴ But experts say that helping rural patients make sustainable changes often requires tailoring plans to fit their environment, individual preferences and physical abilities.

“I offer group activities and talk about individual goals,” she says. For some, Keefe recommends fun, community-based ideas like fitness bingo (cards with pictures showing various movements in each square) or country dancing. She encourages patients to set their activity targets and checks in regularly to track progress and troubleshoot barriers. “The best exercise is the one they’ll actually do,” she says. “And when we individualize that plan, they’re far more likely to stick with it.”

When discussing dietary changes, Keefe starts by asking participants what they like to cook. “We talk through each

recipe—how much lard they use in the beans, whether their tortillas are flour or corn—and then we offer suggestions for swapping with something healthier,” she explains. “I’ll say, ‘I prefer corn tortillas, which are a better choice than flour,’ or ‘I used to cook with half a cup of lard—now I use a tablespoon and my family didn’t notice.’”

Empower patients with education

Misinformation is a major challenge in rural healthcare—especially when it comes to weight, diet and diabetes. “There’s so much misinformation, including rumors and folk remedies,” Keefe says. “People would rather ask a neighbor for health advice than a doctor.” To address this, Keefe recommends acknowledging that what they believe to be true is a common misconception, then discussing the facts with the patient to correct it. “We build on what they already know and discuss things in a logical way and help them figure out the reasoning.”

Providers can also increase their impact by delivering education in familiar venues. “I’ve held sessions in community centers, senior centers and even libraries,” Keefe says. “These informal, comfortable spaces make it easier for patients to open up and ask questions.”

Help patients get financial assistance

When lifestyle changes alone are insufficient, pharmacotherapy can be a valuable alternative, with GLP-1 receptor agonists (GLP-1 RAs) showing promise in treating chronic weight management.⁵ However, high costs and limited insurance coverage can

prevent rural patients from obtaining them. HCPs can direct patients to cost-saving resources such as:

- GoodRx for prescription coupons and price comparisons (goodrx.com)
- NeedyMeds for a comprehensive list of manufacturer savings programs (needymeds.org)
- BenefitsCheckUp for Supplemental Nutrition Assistance Program (SNAP), Medicaid and other support (benefitscheckup.org)

For patients with SNAP benefits, providers should find out if their state allows SNAP dollars to be used at farmers’ markets or CSAs, which can stretch access to fresh food. Many markets now offer “double bucks” programs, where SNAP dollars go twice as far when used for produce (fairfoodnetwork.org). ●

—by Han-Gwon Lung

“We need to teach our patients how to navigate food options that are actually available to them.”

—Joanne Keefe,
FNP, MPH

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PATIENT: JOHN, 47, WEIGHED 308 LBS. WITH A BMI OF 44.2. HE WAS DIAGNOSED WITH OBESITY, DYSLIPIDEMIA AND MASLD.

“John’s goal was to improve his overall health and self-esteem”



PHYSICIAN:

Angela Tran, DO

*CEO & Founder,
Med-Fit Medical
Weight Loss,
Denver, CO*

History:

At his initial visit, John weighed 308 lbs. at 5'10" with an A1C of 6.6% and a BMI of 44.2. His underlying metabolic conditions included chronic obesity, dyslipidemia and metabolic dysfunction-associated steatotic liver disease (MASLD). His previous PCPs did not prescribe medications, so he took OTC supplements for blood sugar control and weight management.

John had a sedentary job working long hours at his computer. He dined out with his family several times a week but mostly had home-cooked meals. He also said he used to hike and lift weights, but chronic low back pain and an ankle injury prevented him from doing physical activity. John tried numerous diets in the past with little sustainable success. He reported having low energy, poor concentration and difficulty sleeping. We discussed potential underlying OSA, but his doctors did not recommend a sleep study. John’s main challenge was his inability to lose weight, and his goal was to improve his overall health and self-esteem.

Initiating treatment:

We discussed our plan to lose 100 lbs., which included a full metabolic panel, anti-obesity medication and lifestyle counseling. I explained the weight-loss benefits of GLP-1 receptor agonists (GLP-1 RAs) and how studies indicate they can optimize A1C, reduce liver fat and improve other metabolic parameters. John was counseled on the potential GI side effects as well as the small risk for medullary thyroid cancer. I told him we would monitor for any symptoms related to gallbladder disease or pancreatitis. We started the GLP-1 RA once weekly and titrated up to the full dose over six months.

We also initiated a weight-loss program of medically graded meal replacements (nutritionally dense protein bars, shakes and soups), and he was instructed on making home-prepped meals with lean protein and vegetables. After three months, we de-

creased his meal replacements, and he began seeing a nutrition coach. I encouraged him to increase his aerobic activity, with two days of resistance training once his ankle injury resolved. He was educated on stress reduction and sleep management, and he asked for a glucometer to monitor his blood sugar levels.

With the combination of GLP-1 RAs and other weight management intervention, John’s weight dropped to 228 lbs. with a BMI of 32.7, and his A1C improved to 5.6% with normalized liver enzymes after six months. At his last visit, he weighed 189 lbs. (BMI 27 and A1C of 5.2%). He exercised 4-5 times a week and his sleep tracker showed he got 7 hours of sleep per night.

Considerations:

For patients like John, GLP-1 RAs have become a critical piece to sustainable success, especially when all other weight-loss attempts have failed. They are life-saving treatments that are clinically proven to be effective for weight loss and weight-related conditions. This case also demonstrates the benefits of a dedicated care team to counsel patients on nutrition, exercise and lifestyle/behavioral changes. Our goals should also include ways to sustain weight loss without dependence on medications. To achieve this, healthcare providers should address their patients holistically.



NEW!

KOL ON DEMAND VIDEO

Scan here for more insight on John’s case.

History:

When Sarah came to see me, she weighed 220 lbs. with an A1C of 5.9%, a BMI of 40 and an LDL-C of 162 mg/dL. She had a history of chronic obesity since high school, and she was diagnosed with prediabetes, pre-hypertension and dyslipidemia. Sarah also complained of severe knee pain caused by stress on her joints, which made walking difficult. She was not taking medications at the time of presentation. Sarah worked as an assistant in an office job and did not engage in any physical activity.

She was divorced with one son and told me she felt stressed as a single parent. Her work schedule did not give her time to prepare home-cooked meals. Sarah admitted to mindlessly snacking, eating fast food and drinking 1-2 glasses of wine several days a week. She had tried numerous commercial weight-loss programs and popular diets in the past without success. She told me she felt defeated trying to lose weight now that she is older and less active. Her biggest challenge was around emotional eating, and she broke down crying in my office because she wanted to be healthy so she could be there for her son.

Initiating treatment:

I spoke with Sarah about treatment to effectively manage her obesity and metabolic risks. Because GLP-1 receptor agonists (GLP-1 RAs) were not an option for her, we discussed short-term use of phentermine as an appropriate option to decrease her hunger, increase her metabolism and promote weight loss. I explained that this medication was a stimulant that would re-

PATIENT: SARAH, 49, HAD CHRONIC OBESITY FOR MANY YEARS. SHE WAS DIAGNOSED WITH PREDIABETES, BORDERLINE PRE-HYPERTENSION AND DYSLIPIDEMIA.

“Sarah broke down in my office saying she wanted to be healthy for her son”

duce her appetite and was approved for up to 3 months of use. In addition, we would monitor for side effects related to increased anxiety, palpitations, high blood pressure and insomnia. I suggested initiating slowly and weaning off phentermine during the second half of her program.

I also referred Sarah to a nutritionist, a health coach and a physical therapist who worked with her to establish a daily meal plan and exercise routine. Her nutrition counselor and health coach helped Sarah manage her emotional eating and gave her coping mechanisms that did not involve using food for comfort. Physical therapy also helped her increase physical activity without knee pain. Sarah tolerated the medication well, which produced effective appetite suppression and helped her achieve weight-loss results.

After 6 months, Sarah lost 35 pounds, her BMI significantly improved to 33.2 and her LDL-C dropped to 110 mg/dL. We continued with the nutrition plan along with weekly coaching and accountability, and, a year lat-

er, her BMI was 24.1. Sarah continued with counseling and PT, which allowed her to go on nature walks with her son to reduce her anxiety. We will repeat her blood work panel at the end of the program to see the improvements so that we can avoid adding medications such as a statin for cholesterol management. She re-enrolled in our extension program so that we could continue her weight-loss journey together.

Considerations:

Sarah's case illustrates the need for a comprehensive approach to obesity management that considers the patient's underlying conditions as well as their individual needs. While GLP-1 RAs are extremely effective in treating obesity, clinicians should consider alternative therapies, if necessary, that can achieve positive weight-loss results. Changing nutrition and exercise patterns is essential to obesity management, as is addressing the mindset and behavioral issues that are the leading indicators for why certain patients have higher rates of maintenance success. ●



Q

A

*Expert insight
on managing
overweight/obesity*



Sparking motivation

Q: How do you keep patients motivated to continue lifestyle changes?

A: It's important to understand each patient's personal motivation, which varies for everyone. Clinicians should not focus solely on medical treatment without providing the necessary education on behavioral change strategies. I've identified two main groups of patients who share common characteristics but require different motivational approaches.

The first group is motivated by results. They thrive when changes are quick and visible and fol-

lowing plans that are organized step-by-step. They want to feel that they are "winning." I like to give these patients a structured, personalized nutrition and exercise plan that includes necessary blood work and medications (as an option). We use an accountability-based approach to weight loss guided by a health-coaching team. These patients are also motivated by measurable metrics. Beyond the scale, we focus on more meaningful indicators that keep them motivated, such as body fat percentage, body composition, other metabolic parameters, sleep quality and daily step counts.

The second group is motivated by emotional support. These patients often

feel alone in their journey and benefit most from professionals who can guide them towards their goals. I also like to include a partner or spouse, friends, co-workers or a community group in this circle of support. We also teach them self-motivation, which shows them ways to change their mindset by recognizing their supportive and nonsupportive thought patterns. We then guide them in reframing negative beliefs into positive ones that foster progress and resilience.

—Angela Tran, DO,
CEO & Founder, Med-Fit
Medical Weight Loss
Center, Denver, CO

Dispelling misinformation

Q: What are your tips on educating patients to improve adherence?

A: An educated patient is an empowered patient. Nowadays, information travels fast—particularly false and bad information. Often, when you ask the patients where they got their information, the sources are not based on fact. Patients receive lots of misinformation about medication from friends, family and on social media.

As clinicians, this may not be what we signed up for, but it has now become our responsibility to provide correct information. This is the reason I started

my presence on social media: to speak truth to false narratives in medicine. Often I pull up studies and discuss patient population, outcomes and benefits/risks and visually show patients. I take the approach of educating, waiting and reevaluating.

In addition, I take the extra time to discuss clinical studies and provide copies for patients to review with family members, so they are fully informed before making medical decisions. I set follow-up appointments to answer any additional questions they may have developed from their reading. Once I feel they are properly educated, I revisit their decision to either accept or deny the medical plan I have outlined for them.

—**Brandi Addison, DO**
Endocrinologist at South Texas Endocrinology & Metabolism Center, Corpus Christie, TX

The maintenance challenge

Q: How do you help patients maintain their weight loss?

A: The first key to weight maintenance is providing education. I remind my patients that it may take more effort to keep the weight off than to lose it. For example, I'll explain that if they are 200 pounds and walk a mile, they'll burn a certain number of calories.

Yet if they get down to 150 pounds and walk the same mile, they'll burn fewer calories, so they may need to expend more energy to maintain the weight loss.

When they come back for a visit, I ask how they're doing, what's working, what's not, and make modifications to help them adhere to their weight maintenance plan. For patients who are tied to their cell phones, we also send text reminders; studies show this helps with adherence. It takes persistence and engagement on the part of both the patient and the provider.

—**Ved Gossain, MD**,
Professor of Medicine Emeritus/Endocrinology and Metabolism, Michigan State University, East Lansing, MI

The role of pharmacology

Q: Which patients are candidates for obesity medication?

A: Consideration for using pharmacotherapy should be based on the severity of obesity, specifically for patients who have a BMI ≥ 30 or ≥ 27 with obesity-related complications, and perhaps their history of previously attempted lifestyle modifications. However, the AACE guidelines go beyond obesity classification with BMI, staging the disease clinically via complications of obesity.

It is recommended to use medications for those with stage 0 obesity if they have not responded well to lifestyle therapy alone or have experienced weight regain after initially successful lifestyle therapy alone. For patients with stage 1 obesity, medications should certainly be considered if the clinical evaluation supports the likely benefit of earlier treatment. Patients with stage 2 obesity with severe complications like type 2 diabetes or severe sleep apnea should be offered initiation of medication concurrently with lifestyle therapy, with the goal of earlier amelioration of that complication through weight loss. I incorporate medications into a patient's regimen after explaining the rationale and how it may help them battle the pathophysiologic barriers to weight loss, such as increased hunger hormones and cravings. I tell patients that medications may enable them to do better with their dietary prescription and overall weight-loss plan. The AACE guidelines include an algorithm that helps guide clinicians in suggesting one of the available pharmacological options based on the patient's clinical characteristics and coexisting diseases (see pro.aace.com). ●

—**Karl Nadolsky, DO, FACE**
Diplomate, American Board of Obesity Medicine; Assistant Clinical Professor, Michigan State University, East Lansing, MI

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Clinician Update

EXAM TOOL

Screening for overweight/obesity

The American Association of Clinical Endocrinology recognizes obesity as a chronic disease and recommends annual screening of BMI and other health parameters. When a patient presents with excess weight, use the checklist below to gauge the need for medical intervention, including lifestyle therapy and, when appropriate, obesity medication or surgery. And keep in mind: The success of treatment should be measured not solely by number of pounds lost, but also by improvements in weight-related complications and overall health.

1. Does the patient have a body mass index (BMI) and weight-related complications that meet indications for prescribing obesity medication?

- ☐ **BMI ≥ 30** (obesity)
(all BMI cutoffs may be lower in certain ethnicities)
- ☐ **BMI ≥ 27** (overweight)
with at least one weight-related complication, such as:
 - Prediabetes or type 2 diabetes
 - Metabolic syndrome
 - Hypertension
 - Dyslipidemia
 - Cardiovascular disease
 - Metabolic dysfunction-associated steatotic liver disease (MASLD)
 - Obstructive sleep apnea
 - Asthma/reactive airway disease
 - Osteoarthritis
 - Hormonal issues (e.g., polycystic ovarian syndrome)
 - GERD
 - Urinary stress incontinence

2. If BMI < 35 , is waist circumference indicative of cardiometabolic disease? (Use gender- and ethnicity-specific cutoffs.)

- ☐ **Women: ≥ 35 inches**
- ☐ **Men: ≥ 40 inches**

3. Has the patient attempted lifestyle therapy, including nutritional and behavioral changes and increased physical activity?

- ☐ **Yes** Measures tried: _____
- ☐ **No**

4. Is the patient aware obesity is a chronic disease caused by genetic, metabolic, behavioral and environmental factors?

- ☐ **Yes**
- ☐ **No**

5. Is the patient motivated to set weight-loss goals and work with you on a personalized treatment plan?

- ☐ **Yes**
- ☐ **No**

Note: For detailed recommendations on weight management, see Garvey WT, et al. AACE/ACE Comprehensive Clinical Practice Guidelines for Medical Care of Patients with Obesity. *Endocrine Pract.* 2016;22(Suppl 3):1-203.