Integrating GLP-1s into the Future of MSK Care

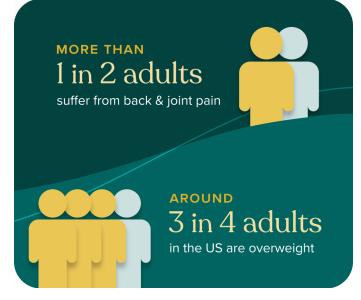
WRITTEN BY Vori Health Team

THE CHALLENGE

Glucagon-like peptide-1 agonists (GLP-1s) have permanently altered the landscape of obesity care—as well as its many comorbid conditions including chronic musculoskeletal (MSK) pain. For a large segment of the U.S. population who suffer from both obesity and MSK pain, GLP-1s represent a long-awaited beacon of hope for better health. At the same time, the GLP-1 wave is leaving in its wake a litany of obstacles for the industry to wade through—including hefty price tags, health equity issues, and unknown side effects associated with a lifetime drug.

As the industry scrambles to navigate these complexities, clinicians, payers, and employers alike need to align on a **sustainable GLP-1 care model.**

When it comes to treating high-cost comorbid conditions like obesity and musculoskeletal pain, **it is clear that GLP-1s cannot suffice as a stand-alone solution.**



The majority of American adults are impacted by one or both of these conditions.

Musculoskeletal pain & obesity: High prevalence, high impact

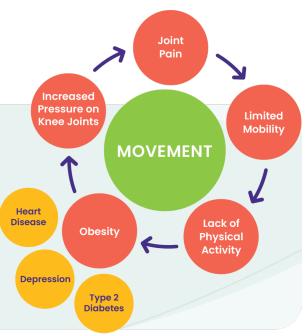
According to the Centers for Disease Control and Prevention, **over 41 percent of adults and nearly 20 percent of children in the U.S. are obese** (CDC, 2023). The former figure increases to 74 percent when overweight adults are factored into the equation (CDC, 2023). Likewise, an estimated one in two Americans suffers from an MSK condition (AAOS, 2016).

Together, obesity and MSK disorders impact a major portion of the American population. One condition often exacerbates the other as added weight increases joint pressure and pain, leading to a vicious cycle of decreased mobility, increased inflammation, and subsequent weight gain. As a result, **the risk of MSK issues existing alongside obesity is almost guaranteed.** In one cross-sectional study, more than 90 percent of individuals with a body mass index over 42 reported MSK pain (Rosa, 2021). Obesity also increases an individual's risk of requiring a knee replacement by 20-fold (AAOS, 2015).

A web of comorbidities

The health implications of obesity and MSK pain don't stop there—when individuals have both conditions, they are also at risk for other highcost and life-threatening comorbidities. Up to 85 percent of patients with MSK issues suffer from depression, and about 1 in 2 adults with depression have obesity (Melkevic, 2018; CDC, 2014). Moreover, more than 1 in 3 people with obesity and arthritis have at least one risk factor for cardiovascular disease (Sewell, 2022).

Whether through higher joint stress or systemic inflammation, obesity and pain are intricately connected to one another and, by extension, a host of other chronic health conditions that drive high healthcare consumption. As such, individuals with obesity and MSK disorders often need more care and are **far more likely to be long-term, high-cost members**.



Without healthy movement, a vicious cycle of joint pain, immobility, obesity, and other comorbidities begins.

Image courtesy of © Movement is Life.

The cost conversation

Generating hundreds of billions of dollars in combined healthcare costs, obesity and MSK issues pose a serious threat to employer and payer bottom lines. Here's the financial breakdown for both conditions, factoring in direct and indirect costs:

- Obesity: The total cost of obesity care in the U.S. adds up to more than \$260 billion, with average healthcare costs more than doubling for obese patients. For class 3 obesity (formerly known as morbid obesity), medical costs increase by over 233 percent (Cawley, 2021).
 Obesity drives costs in every sector of healthcare spend, including inpatient care, outpatient care, and prescription medications (Cawley, 2021). In terms of productivity loss, one systematic review found that obesity costs employers up to \$4,175 per employee due to presenteeism and up to \$6,579 per employee due to absenteeism each year (Goettler, 2017).
- MSK conditions: The cost burden for MSK care surpasses \$381 billion in part due to a treatment paradigm centered around inappropriate imaging, unnecessary surgeries, and addictive opioids (Dieleman, 2020). Moreover, MSK pain takes a serious toll on workplace productivity. Low back pain (LBP) is one of the leading causes of disability, costing employers 27 work days per affected employee due to temporary total disability, as well as \$1.21 million annually from LBP-related presenteeism (GBD, 2023; Gaspar, 2021; Allen, 2018).

To help slash obesity healthcare spend, and by extension its comorbidities like MSK pain, many stakeholders are making the case for GLP-1 medications like Ozempic, Wegovy, and Mounjaro. But while these solutions have proven to be effective for short-term weight loss, **their long-term impact is less clear**.



GLP-1s: friend or foe?

GLP-1s quickly rose to fame as a "miracle drug" for weight loss. Originally branded as a medication to treat type 2 diabetes, GLP-1s promote weight loss by reducing appetite and cravings, delaying stomach emptying, and lowering blood sugar (Collins, 2023). While many are happy with their results from GLP-1s, it's critical for employers and payers to take a step back and **evaluate the true benefits and costs of these medications.**

CONS

PROS

- Can help jumpstart weight loss
 for refractory cases
- Weight loss reduces pressure on joints
- Can improve pain and other symptoms of arthritis (10 pounds of weight loss = 30-60 pounds less pressure on knee joints)
- Early data points to a 20 percent reduction in major adverse cardiovascular events (<u>Harris, 2023</u>)
- Possible reduction in blood pressure, cholesterol levels, and inflammation
- Potential clinical benefits for other conditions such as neurological diseases, metabolic disorders, and cancer

- GLP-1s do not work for everybody
- Weight loss plateaus at 18 months after starting treatment (Blum, 2023)
- High likelihood of rebound weight gain after stopping the medication
- The cost per month ranges from \$936 to \$1,349 for different brands (Amin, 2023)
- Known side effects include common Gl issues with data pointing to the possibility of more serious events, such as pancreatic complications
- Other side effects of long-term use are not fully understood
- May cause lean body and muscle mass loss, which can increase the risk of fractures, arthritis, and other conditions (Sargeant, 2019)
- Over 70 percent of people discontinue use at 24 months (Weiss, 2020)
- High out-of-pocket costs create
 equity-related barriers to care
- Patients are not incentivized to adopt healthy behavior

The case for behavior change

While semaglutide, the active ingredient in popular GLP-1s, is proven to help reduce body weight by around 15 percent, these results are often short-lived (Wilding, 2021). In many cases, GLP-1s are used as a band-aid solution to help patients lose weight quickly without additional support for healthy eating habits and lifestyle behaviors. This is why **GLP-1 users regain twothirds of their weight after stopping treatment** (Wilding, 2022). Administering an injection once a week does not constitute behavior change—these improvements take time and work, yet many individuals do not receive the support needed to make these foundational lifestyle shifts.

The Endocrine Society's clinical practice guidelines on the <u>Pharmacological</u> <u>Management of Obesity</u> mirrors these sentiments, explaining: "Weight loss medications do not change the underlying physiology of weight regulation in any way... **They do not 'work on their own.'** To get maximal efficacy, obesity drugs should be used as adjuncts to lifestyle change therapy, and in some cases weight loss is limited without lifestyle change (Apovian, 2015)."

The same limits apply to cost-savings. A recent analysis from Deloitte noted that "without lifestyle intervention, **it is highly unlikely that GLP-1s will reduce long-term costs** or meaningfully alter the current trajectory (<u>Van</u> <u>Antwerp, 2023</u>)."

THE SOLUTION

Obesity and chronic MSK pain are multifaceted and interconnected conditions with close ties to other health issues. While GLP-1s may be a good start for many individuals, the full benefits of these drugs will not be reaped if given in isolation. To improve long-term outcomes and curb high-cost claims, GLP-1s should be prescribed as part of innovative care models that simultaneously address lifestyle and behavior change.

Integrative care moves the GLP-1 needle

With a doctor-led, whole-person care model, Vori Health is uniquely positioned to navigate the complexities of GLP-1s, MSK issues, and obesity. At Vori Health, members struggling with obesity and MSK pain are eligible to receive physician-guided access to GLP-1 medications within a clearly defined program that 1) requires member engagement, 2) includes substantial support for behavior and lifestyle change, and 3) assists members with medication off-boarding.

To enter the program, members must meet specific medical criteria. Once enrolled, members receive 360° support from a holistic care team including a specialty physician, physical therapist, health coach, and registered dietitian. These care teams work collaboratively to personalize treatment plans that align with each member's goals and **address the root causes of obesity and MSK pain**. Vori physicians and physical therapists help members in the program reduce pain, regain function and mobility, and combat any muscle mass loss that GLP-1s may cause. At the same time, Vori's health coaches and dietitians help members establish smart goals, promote antiinflammatory nutrition and exercise habits, and unblock barriers to behavior change.

Throughout the program, **Vori Health takes a clear stance on the importance of a healthy lifestyle**: Members must demonstrate engagement in and progress towards specific behavior changes in order to maintain enrollment in this GLP-1 program.



A BIOPSYCHOSOCIAL CARE MODEL

Vori Health's holistic care model is uniquely positioned to navigate the complexities of GLP-1s and the comorbid nature of obesity and MSK pain. The overarching goal of Vori Health's GLP-1 program is to help an individual with obesity reduce MSK pain. If using a GLP-1 is medically appropriate, Vori Health's doctor-led care teams will utilize and manage this pharmaceutical approach for a maximum of one year. If members resolve their underlying MSK issue or are in need of longer-term GLP-1 management, Vori physicians then collaborate with the member's PCP to co-manage or transfer oversight of GLP-1 care, with the aim to eventually off-board the member from the medication.

Pain and obesity care designed for lasting results

If you are considering covering GLP-1s for your employees or members, ensure they have access to integrative doctor-led MSK care as a part of their overall health journey.

Reach out to our team to learn more about a new type of care that leverages these medications within a whole-person program that anyone can receive from the convenience of their home.

Want to learn more about how integrative care can improve outcomes for members with chronic conditions?

Schedule a demo

REFERENCES

- <u>CDC, 2023</u>: Centers for Disease Control and Prevention. Data & Statistics: OverWeight and Obesity.
- AAOS, 2016: One in two Americans have a musculoskeletal condition costing an estimated \$213 billion each year in treatment and lost wage. News release. American Academy of Orthopaedic Surgeons. March 1, 2016. Accessed October 5, 2023.
- Rosa, 2021: Rosa S, Martins D, Martins M, Guimarães B, Cabral L, Horta L. Body Mass Index and Musculoskeletal Pain: A Cross-Sectional Study. Cureus. 2021;13(2):e13400.
- <u>Walsh, 2018</u>: Walsh TP, Arnold JB, Evans AM, Yaxley A, Damarell RA, Shanahan EM. The association between body fat and musculoskeletal pain: a systematic review and meta-analysis. BMC Musculoskelet Disord. 2018;19(1):233.
- Cawley, 2021: Cawley J, Biener A, Meyerhoefer C, et al. Direct medical costs of obesity in the United States and the most populous states. J Manag Care Spec Pharm. 2021;27(3):354-366.
- <u>Goettler, 2017</u>: Goettler A, Grosse A, Sonntag D. Productivity loss due to overweight and obesity: a systematic review of indirect costs. BMJ Open. 2017;7(10):e014632.
- <u>Dieleman, 2020</u>: Dieleman JL, Cao J, Chapin A, Chen C, Li Z, Liu A, Horst C, Kaldjian A, Matyasz T, Scott KW, Bui AL, Campbell M, Duber HC, Dunn AC, Flaxman AD, Fitzmaurice C, Naghavi M, Sadat N, Shieh P, Squires E, Yeung K, Murray CJL. US Health Care Spending by Payer and Health Condition, 1996-2016. JAMA 2020;323(9):863-884.
- <u>GBD, 2023</u>: GBD 2021 Low Back Pain Collaborators. Global, regional, and national burden of low back pain, 1990-2020, its attributable risk factors, and projections to 2050: a systematic analysis of the Global Burden of Disease Study 2021. Lancet Rheumatol. 2023;5(6):e316-e329.
- Gaspar, 2021: Gaspar FW, Thiese MS, Wizner K, Hegmann K. Guideline adherence and lost workdays for acute low back pain in the California workers' compensation system. PLoS One. 2021;16(6):e0253268.
- <u>Allen, 2018</u>: Allen D, Hines EW, Pazdernik V, Konecny LT, Breitenbach E. Four-year review of presenteeism data among employees of a large United States health care system: a retrospective prevalence study. Hum Resour Health. 2018;16(1):59.
- <u>Collins, 2023</u>: Collins L, Costello RA. Glucagon-Like Peptide-1 Receptor Agonists. In: StatPearls. NCBI Bookshelf version. StatPearls Publishing; 2023. Accessed October 5, 2023.
- <u>Harris, 2023</u>: Harris E. Semaglutide Improves Heart Failure and Cardiovascular Disease. JAMA. 2023;330(12):1127.
- Blum, 2023: Blum D. You Won't Lose Weight on Ozempic Forever. New York Times. September 18, 2023. Accessed October 5, 2023.
- <u>Amin, 2023</u>: Amin K, Telesford I, Singh R, Cox C. How do prices of drugs for weight loss in the U.S. compare to peer nations' prices? Peterson-KFF Health System Tracker. August 17, 2023. Accessed October 5, 2023.
- <u>Weiss, 2020</u>: Weiss T, Carr RD, Pal S, et al. Real-World Adherence and Discontinuation of Glucagon-Like Peptide-1 Receptor Agonists Therapy in Type 2 Diabetes Mellitus Patients in the United States. Patient Prefer Adherence. 2020;14:2337-2345.
- <u>Wilding, 2021</u>: Wilding JPH, Batterham RL, Calanna S, et al. Once-Weekly Semaglutide in Adults with Overweight or Obesity. N Engl J Med. 2021;384(11):989-1002.
- <u>Wilding, 2022</u>: Wilding JPH, Batterham RL, Davies M, et al. Weight regain and cardiometabolic effects after withdrawal of semaglutide: The STEP 1 trial extension. Diabetes Obes Metab. 2022;24(8):1553-1564.
- Van Antwerp, 2023: Van Antwerp G. Growth of GLP-1s has implications for multiple stakeholders. Deloitte. September 21, 2023. Accessed November 15, 2023.
- <u>Apovian, 2015</u>: Apovian CM, Aronne LJ, Bessesen DH, et al. Pharmacological management of obesity: an Endocrine Society clinical practice guideline [published correction appears in J Clin Endocrinol Metab. 2015 May;100(5):2135-6]. J Clin Endocrinol Metab. 2015;100(2):342-362.
- VI, 2023: 2023 Validation Report. Validation Institute.
- <u>Naidu, 2022</u>: Naidu I, Ryvlin J, Videlefsky D, Qin J, Mowrey WB, Choi JH, Citron C, Gary J, Benton JA, Weiss BT, Longo M, Matmati NN, De la Garza Ramos R, Krystal J, Echt M, Gelfand Y, Cezayirli P, Yassari N, Wang B, Castro-Rivas E, Headlam M, Udemba A, Williams L, Gitkind AI, Yassari R, Yanamadala V. The Effect of a Multidisciplinary Spine Clinic on Time to Care in Patients with Chronic Back and/or Leg Pain: A Propensity Score-Matched Analysis. J Clin Med. 2022;11(9):2583.

ABOUT VORI HEALTH

Vori Health is a specialty medical practice delivering a virtual-first musculoskeletal (MSK) solution to help members get back to their lives faster. As the only nationwide MSK practice with doctor-led care teams, Vori Health is the most convenient way to access appropriate care for back, neck, and joint pain without bouncing around the healthcare system. Whether members need a diagnosis, non-opioid prescription, personalized physical therapy, and/or health coaching, they can turn to Vori Health for evidence-based care and effective end-to-end support. Learn how this holistic model reduces unnecessary surgeries, enables faster recoveries, and lowers MSK spend with up to a 4:1 ROI.

