



# Breaking the Cycle: Addressing Mental Health to Treat MSK Pain

## THE CHALLENGE

Chronic musculoskeletal (MSK) pain and depression devastate millions of lives every year. A well-documented relationship between these conditions shows that they often coexist—and when they do, one disorder tends to worsen the symptoms and outcomes of the other.

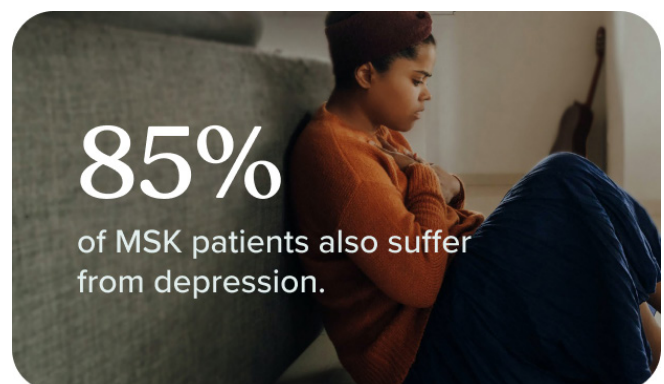
The comorbid nature of MSK and mental health disorders should ring the alarm bell for all stakeholders, especially those responsible for covering the cost of care. Collectively, these conditions account for more than **\$560 billion** in annual healthcare costs and **21 percent of employer healthcare spend** ([Dieleman, 2020](#); [Optum, 2019](#); [LBL, 2020](#)). Understanding how these conditions intersect is critical to solving their massive impact on member lives and total healthcare spend.

### A bidirectional and volatile relationship

Up to one in two American adults struggles with MSK pain and more than one in five battles a mental health disorder. A large body of research suggests that a bidirectional relationship between these disorders fuels their high prevalence rates, consistently pushing these conditions to the top of employer and payer healthcare costs ([Hooten, 2016](#)).

Research shows that, on average, **65 percent of patients with depression report MSK pain**, and up to **85 percent of patients with MSK disorders also suffer from depression** ([Melkevic, 2018](#)).

Why do these conditions so frequently coexist? For one, they share multiple lifestyle factors. MSK pain can lead to functional impairment, an inability to work, interpersonal difficulties, a loss of independence, and social isolation—all risk factors closely tied to poor mental health. This reciprocal relationship creates a devastating cycle of pain-induced emotional distress, such as feelings of helplessness and



social withdrawal, which can worsen both physical and mental status. In addition to common lifestyle factors, experts have uncovered biological connections that link poor mental health and pain. For example, both mood and pain share similar processing pathways in the brain and nervous system. When a disturbance arises in one pathway, research shows that abnormal signaling can follow in the other—a snowball effect which has been observed in the setting of chronic pain. Studies show that when the brain is inundated with constant pain signals, it can undergo structural changes that increase an individual's risk of developing a mental health disorder ([Yang, 2019](#)).

### Implications for employers and payers

The multiple intersections between mental health and MSK disorders all converge into a downward spiral of problems for both members and those responsible for providing and paying for coverage.

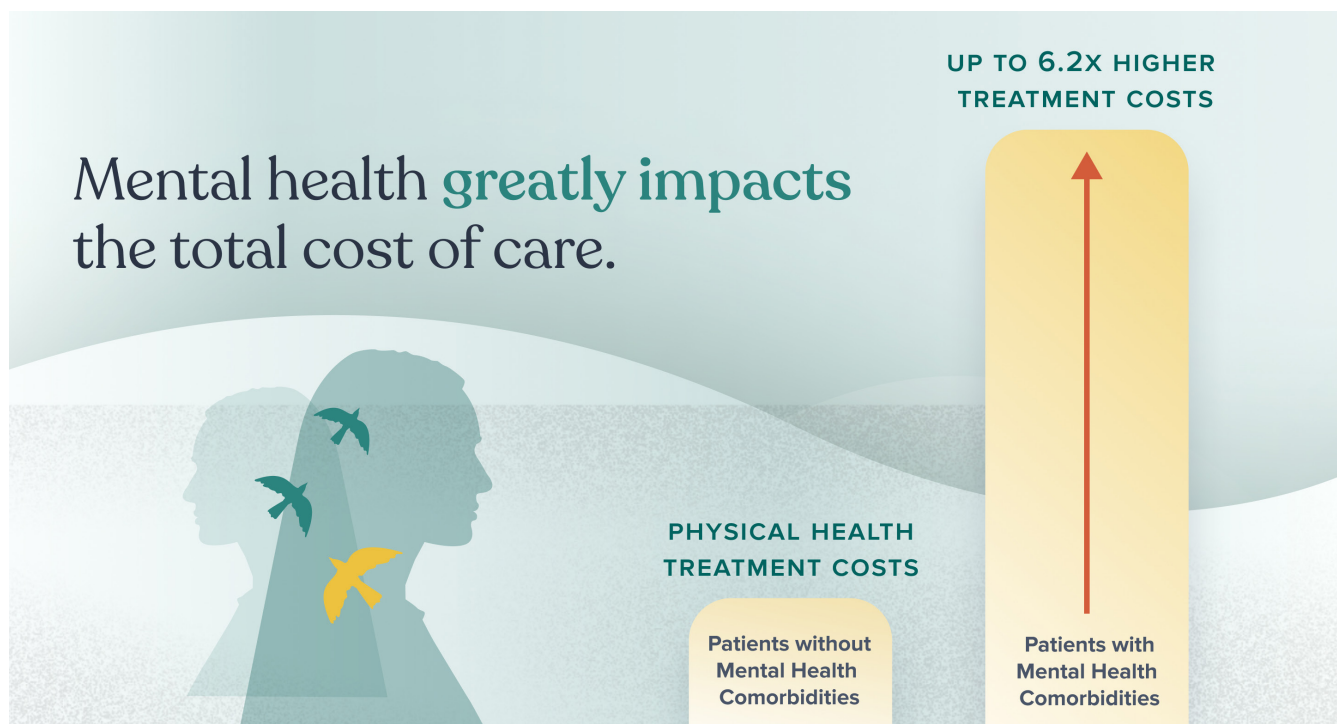
### Long, ineffective treatments

When members begin experiencing MSK and mental health issues, there is a good chance that their journey to relief will

not be brief. Research shows that poor mental health not only amplifies MSK symptoms, but also hinders treatment compliance. According to a recent study, **physical therapists cite depression and anxiety as having the most negative influence on program adherence** ([Picha, 2021](#)). This mutually destructive relationship leads to the all too common scenario of a slow recovery rife with frustration and poor outcomes.

### Skyrocketing healthcare spend

In addition to the astronomical rate of MSK care spending (\$380 billion annual total cost of care), adding mental health to the mix poses a legitimate threat to employer and payer bottom lines ([Dieleman, 2020](#)). One retrospective cohort study found that MSK patients with psychological distress and depression were far more likely to be persistent high-cost utilizers, ranking in the top 15th percentile for MSK-related healthcare expenditures ([Lentz, 2019](#)). Additionally, a recent claims analysis discovered that members with both physical and mental health conditions generated up to 6.2 times higher healthcare costs than those without mental comorbidities ([Davenport, 2020](#)).





## Sicker workforce

From an employee wellness perspective, MSK care initiatives should be a top priority for employers looking to boost productivity and reduce illness-related absences. MSK conditions consume the greatest number of sick days nationwide, with an average of ten days lost per worker—nearly 364 million days total ([USBJ, 2023](#)). Factoring in mental health-related absences, the total productivity loss can quickly reach alarming levels. One study assessing the role of MSK and mental health disorders on long-term sickness absence (LTSA) found that patients with more serious depression and three locations of MSK pain had higher incidence rates of LTSA ([Melkevic, 2018](#)).

Looking at the MSK and mental health profiles from all sides, the need for integrated care could not be more evident. To make a lasting impact on member health and dramatically lower the cost of care, health plans and sponsors should seek out integrative solutions that treat both conditions at the same time.

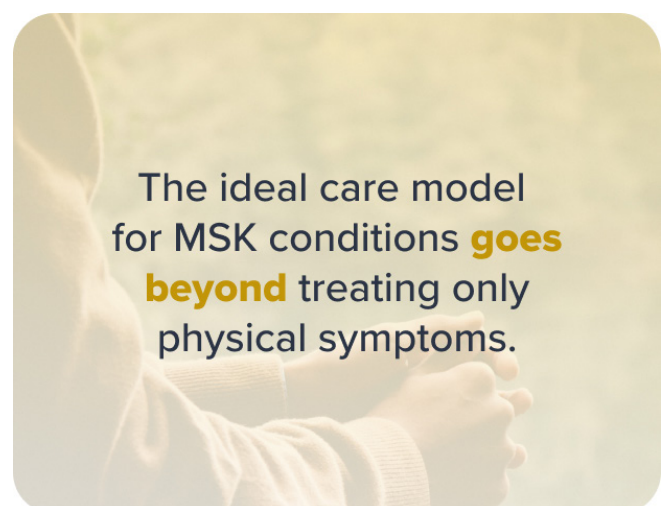
## THE SOLUTION

The ideal care model for MSK conditions goes beyond treating physical symptoms only. Whole-person MSK care that incorporates mental health support provides superior treatment by addressing the undeniable link between these facets of well-being.

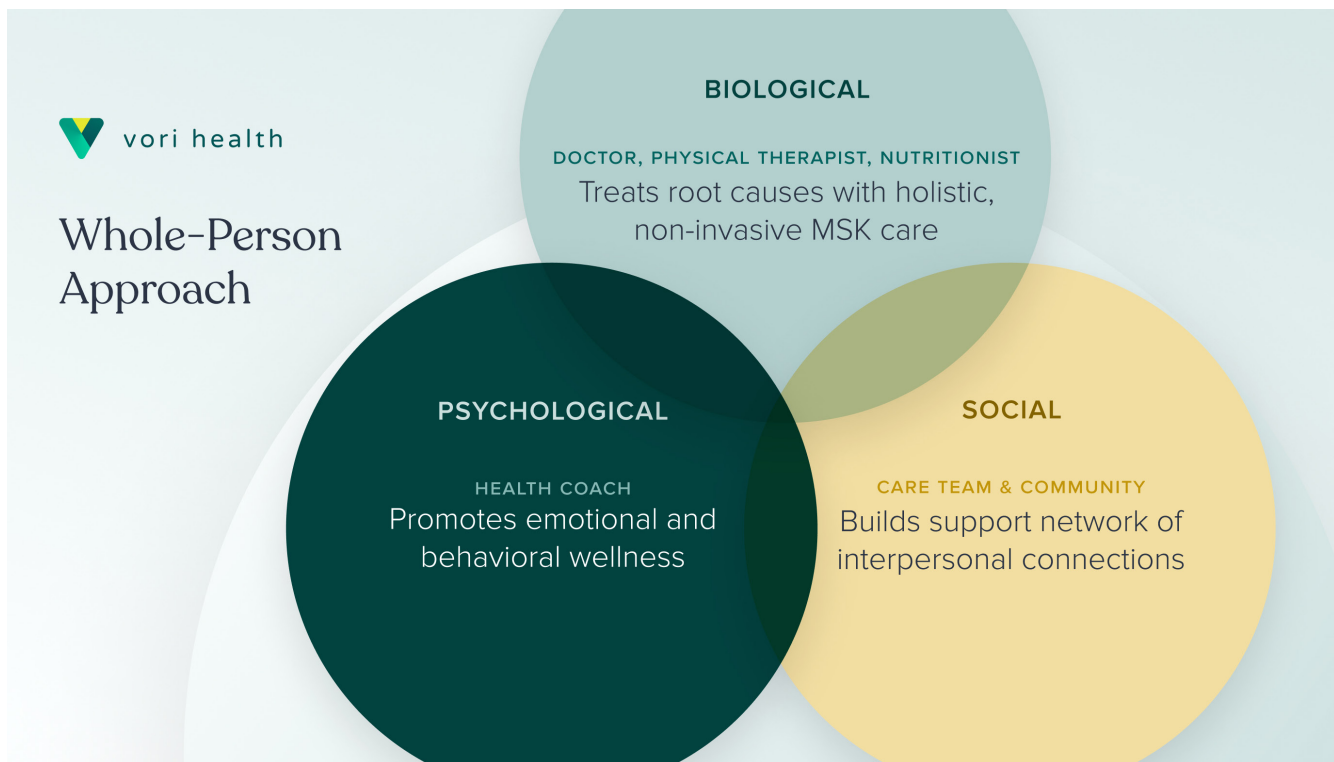
### The role of the biopsychosocial model

Where traditional medical methods have failed to meet these integrative needs, the biopsychosocial model emerges as a high-impact, high-value MSK care pathway. In this model, the journey to relief centers around the patient and matches the multifactorial nature of MSK disorders. Rather than seeing each patient as a list of symptoms, the biopsychosocial model addresses the problem from all sides, aligning with the fundamental truth that the body is an integrated system.

One randomized controlled trial evaluating the impact of combined physical training, mindfulness, and cognitive behavioral therapy on chronic MSK pain found a 37 percent difference in improvement scores from traditional care strategies ([Jay, 2015](#)). The study also found a significant correlation between positive pain outcomes and the number of physical-behavioral training sessions per week ([Jay, 2015](#)).







### The right team

Treating MSK pain is no simple task—and bringing mental health into the picture only makes it more complicated. Moreover, successfully delivering integrated care is near impossible for just one clinician, especially within the traditional healthcare system. That's why Vori Health built its own care model that connects patients with an entire team of non-operative specialty medical doctors, physical therapists, health coaches, and registered dietitian nutritionists—who, together, treat the whole person.

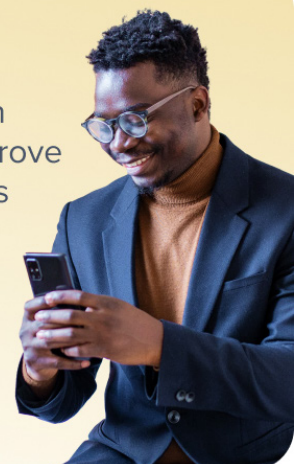
This unique approach to the biopsychosocial model treats MSK pain from all angles, providing effective care that improves both physical and mental outcomes. Vori Health clinicians target not only physical causes of discomfort, such as muscular injury or poor posture, but also emotional triggers like workplace stress, harmful relationships, and traumatic events. As a result, **70 percent of Vori Health patients report improvement in physical, mental, and social well-being**, and **60 percent experience a reduction in feelings of anxiety or depression**. This holistic care model, as certified by the Validation Institute for low back pain, **achieves these results with fewer surgeries and injections** than standard, physician-only care ([VI, 2023](#); [Naidu, 2022](#)).

Here at Vori Health, our team is on a mission to break the costly and debilitating mental health-MSK cycle. With convenient virtual access to holistic MSK doctor-led care teams, Vori patients unlock an easier path to effective treatment and a better quality of life.

Talk to us to learn how our solution can take better care of your members, expedite recoveries, reduce healthcare utilization, lower medical spend, and promote employee productivity—all while improving mental health for greater member care and stronger bottom lines.

Ready to learn  
how whole-person  
MSK care can improve  
member outcomes  
at a **fraction of  
the cost?**

Schedule a Demo





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## 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.

Let's connect!

[www.vorihealth.com](https://www.vorihealth.com)

go@vorihealth.com

(949) 290 6932

