

Addressing MSK pain & mental health with digital care

Chronic musculoskeletal pain and mental health are deeply connected. Learn how to help employees suffering from chronic pain and depression.



Your employees may be struggling with increased pain and related mental health issues. Understanding the connection between MSK pain and mental health is critical for employers to effectively tackle both issues.

800%

Higher risk of depression for people who report 3 or more areas of MSK pain⁵

Depression has been shown to increase the severity and intensity of pain, and chronic MSK pain increases the risk for depression. This feedback loop is known as the depression-pain dyad.¹

65%

Of people with depression also report chronic MSK pain¹

Chronic pain and depression share neural pathways and affect the same regions of the brain. Of people who live with depression, 65% also have chronic pain, compared to only 25–30% in the non-depressed population.² And of people who have chronic pain, an average of 27% will experience depression compared to 5–10% of people in the non-chronic pain primary care population.¹

\$4,300

Employer extra spend per worker per year for those with a major depressive disorder and chronic pain³

Healthcare costs for an average employee who seeks treatment for major depressive disorder exceed \$2,000 per year,³ while treatment for chronic pain can add \$2,300.⁴ Given the high co-morbidity of mental health and MSK pain, employers are increasingly looking to holistic interventions to break the cycle of member's physical and emotional pain.

Pain and depression are linked

Fighting depression without addressing MSK pain is like fighting with one hand tied behind your back. When someone is depressed, both the perception of pain and the emotional ability to manage the pain is disrupted.

Pain also blunts the effects of anti-depression medication.

95% of patients who have refractory depression (depression that does not improve after 12 months of treatment) have an underlying chronic pain condition.

Essentially, difficult-to-treat depression is a chronic pain problem.



Depression-pain dyad & the brain

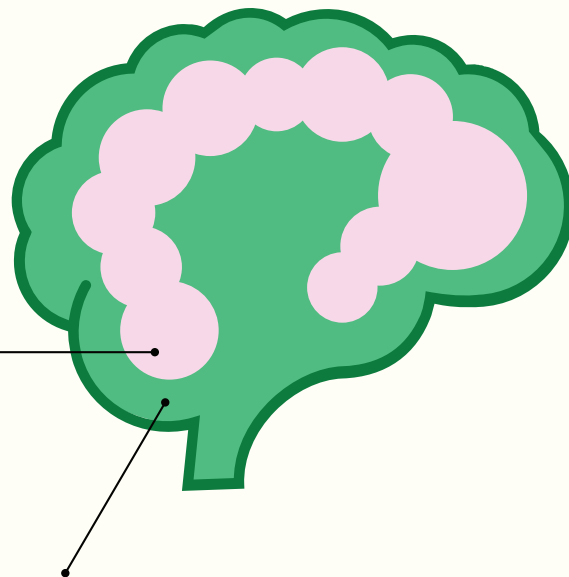
Chronic pain and depression share neural pathways and affect the same regions of the brain.

Amygdala (Emotional processing center)

Depression lowers the amygdala's ability to control emotional response to pain, leading to feeling helpless to overcome pain.⁶

Neurotransmitters

Pain and depression decrease critical neurotransmitters. MSK pain depletes the levels of the neurotransmitter GABA, which leads to increased stress, hypersensitivity, and higher risk of depression.⁷



Hippocampus (Learning & memory center)

Depression raises the intensity of both physical and emotional pain, causing the hippocampus to create a cycle of pain that becomes learned and chronic.⁸



Correlation of pain and depression

2 areas
of pain complaints
(shoulders - knees)

6X
more likely to be depressed¹

3 areas
of pain complaints
(shoulders - knees - forearm)

8X
more likely to be depressed¹

Pain and depression negatively impact the workplace

Lower productivity

- 60% of depressed workers report functional impairment.⁹
- Chronic MSK pain and depression are the top reasons that employees use sick days or PTO.¹⁰
- Up to 40% of sick days are for mental health issues.¹¹
- Employees that continue working at a reduced ability indirectly cost employers 3 times more than those who call in sick.¹²
- Costs associated with termination, recruiting, and re-training.

Job errors

- Injuries related to lack of focus in service and manufacturing.
- Increased workplace conflict.
- Poor customer service.

Higher healthcare utilization

- Employee treatment for major depressive disorder exceeds \$2,000 annually.³
- Employee treatment for chronic pain exceeds \$2,300 annually.³
- The average short-term disability claim for chronic MSK back pain costs employers about \$10,000 in benefits and wage replacement and 50 lost work days.
- Long-term disability increases to about \$35,000 in benefits and wage replacement and 169 work days.⁵



Employer approaches to pain and depression

MSK pain impacts mental health outcomes. Employees with both MSK pain and depression increase healthcare utilization, disability claims, and absenteeism. Health and benefit executives at leading employers recognize that comprehensive, holistic interventions are needed to tackle the comorbid conditions of MSK pain and mental health.

A comprehensive approach is supported by multiple research publications. Global Spine Journal states, "cognitive behavioral therapy has been shown to be just as effective as surgery for chronic low back pain".¹³ And research from the Archives of General Psychiatry reported "improved lower back pain at 7 weeks and 2 years were associated with significantly fewer depressive symptoms."¹⁴

More employers are turning to digital health solutions like Hinge Health to provide at-home care for employees.

Hinge Health offers an integrated team approach to address both the physical and behavioral aspects of care.

Improving pain can impact depression without the typical stigma of addressing mental health. As a result, across the Hinge Health book of business, participants report a 68% reduction in pain coupled with a 58% reduction in anxiety and depression.

3 Steps for employers to tackle pain and depression

1. Recognize the co-morbidity of mental health & MSK pain
2. Approach MSK pain and mental health care more holistically
3. Address employee pain and depression with a digital health solution



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