The State of Sleep & Mental Health 650,000+ individuals 17 self–insured US employers

A report examining the prevalence and associated healthcare costs of poor sleep and mental health in the workplace.

Big Health

The State of Sleep & Mental Health

At Big Health, we create workplace mental health solutions that are clinically proven to help your whole population sleep better, feel happier, and worry less.

Over the last several years, we have compiled a variety of data revealing the prevalence and associated healthcare costs of poor sleep and mental health conditions in the workplace.

We believe this report is the first of its kind to comprehensively examine the impact of poor sleep and mental health on medical and pharmacy claims for employee populations across multiple industries.

Don't just take our word for it...

Healthcare & Disability Claims

Claims for Insomnia, Anxiety and Depression

– 650,000+ individuals
– 17 self-insured US employers

Clinical Sleep Assessment

The impact of poor sleep and mental health on productivity

– 75,000+ employees
– 10 self-insured US employers

Insomnia Investigated

Sleep experts agree that we need at least seven hours of sleep - but for some people, getting a good night of sleep is not an option.

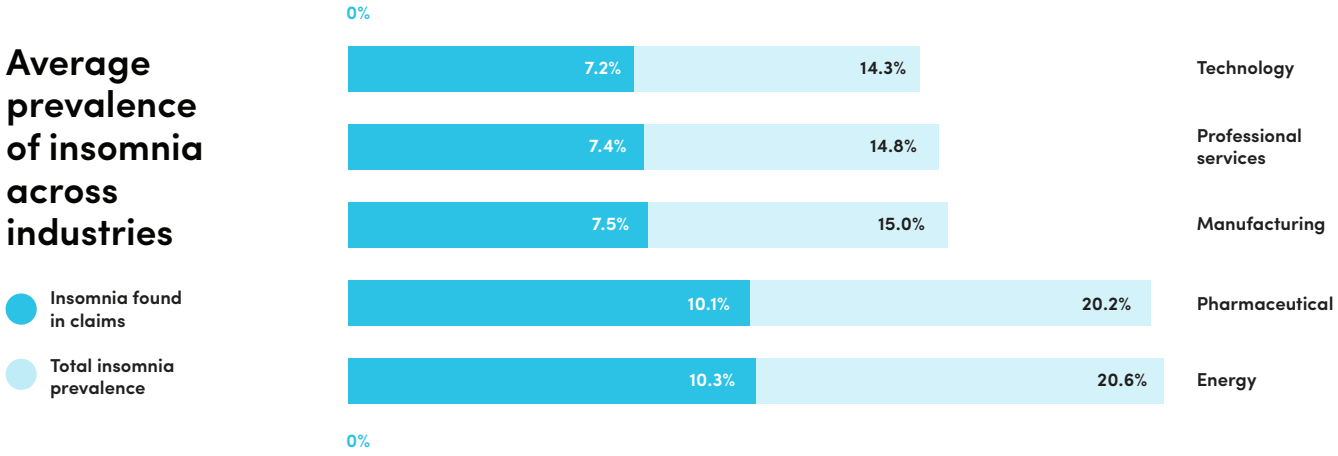
Insomnia - persistent problems falling and staying asleep - is the most common mental health disorder and is directly linked to increased healthcare and disability costs, other mental health conditions, and decreased productivity.

It is well known that over 20% of employees meet the criteria for an insomnia diagnosis, but significantly fewer individuals receive adequate treatment due to low awareness, stigma, and lack of access to high quality care.

Based on the most up to date literature, approximately 50-70% of individuals suffering from a mental health condition do not receive any treatment.

Because of this fact, we expected the number of employees who actually receive an insomnia related diagnoses or sleeping pill prescription to be at least 50% lower than the actual prevalence in that population.

Average prevalence of insomnia across industries



We examined the insomnia-related medical and pharmacy claims of 674,747 individuals in the United States.

Based on diagnoses and prescriptions, an estimated

15.4%

have insomnia

Insomnia is more prevalent in females than males

56.7%

Female

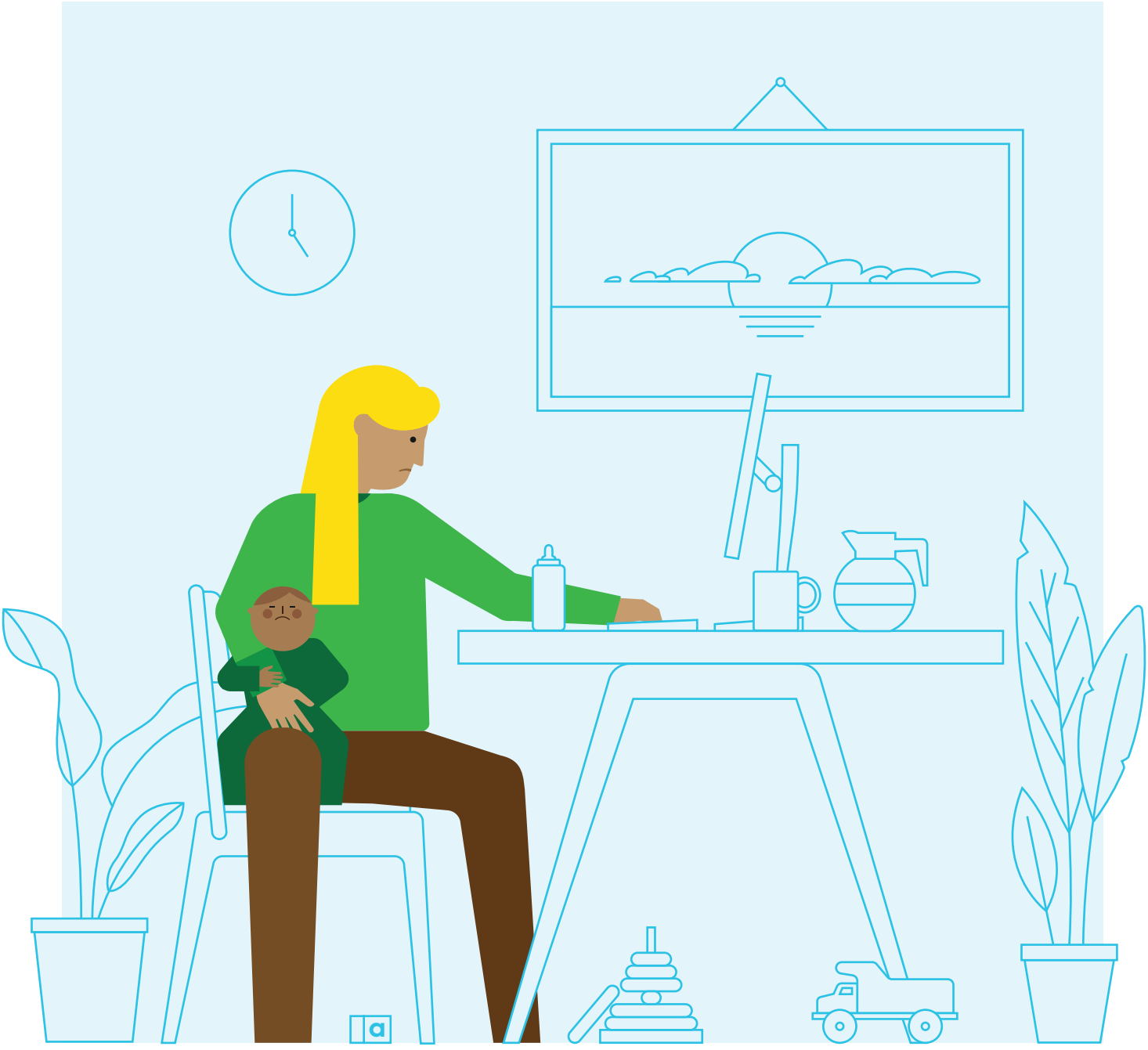
Laurie's Journey

Insomnia is not just a "numbers" problem - it's a human problem.

Laurie is a 32-year-old mother of a demanding toddler who is employed full-time as an executive assistant at Acme Corporation.

She has been struggling to keep up with everything on her plate. Lately, she has noticed that her mood has suffered, and often finds herself staring at her computer screen, exhausted and feeling defeated.

She has limited time to sleep as it is, but is so overwhelmed that she often can't sleep even when she has opportunities to.



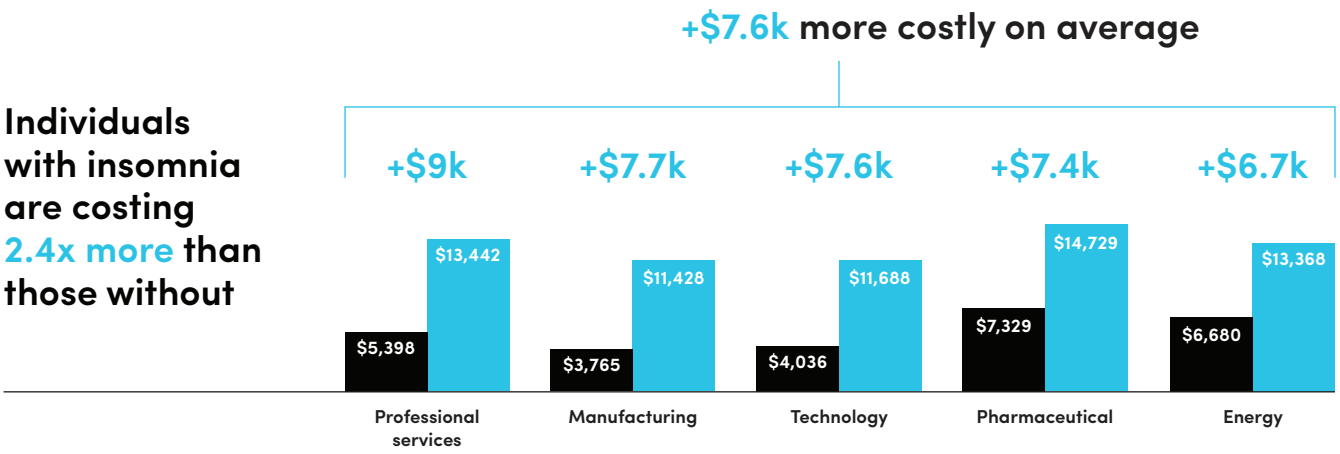
Insomnia is consistently very expensive

It is well known that chronic, physical health conditions such as diabetes are expensive for employers and health plans alike, but what is lesser known and discussed is the true leading cost driver in today's workplace: mental health.

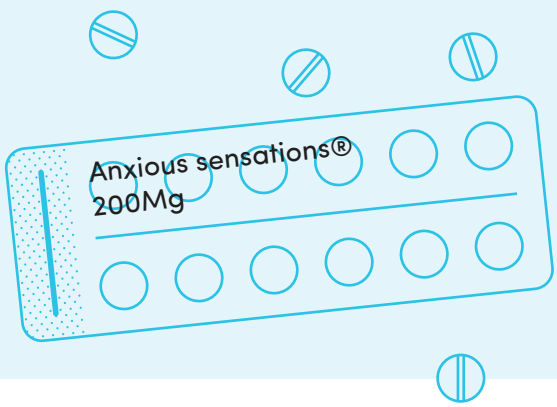
Individuals with insomnia have been shown to have substantially higher healthcare expenditures than good sleepers, which is of particular importance to self-funded employers and health plans.

After evaluating the total annual healthcare claim spend for employees across a variety of industries, we found that employees with insomnia are costing employers over 2.4 times as much as those without insomnia on average; a staggering difference of $7,631 per employee.

Individuals with insomnia are costing 2.4x more than those without



Laurie's Journey



Laurie decided it was time to see her doctor. Her PCP told her she is probably depressed, and prescribed an antidepressant. She tried taking the SSRI pills for a week, but they made her feel anxious so she quit taking the drugs.

A friend recommended that she see a cognitive behavioral psychologist that had great reviews, but when Laurie called to schedule an appointment, she found out that her insurance would not cover the sessions - each one was going to cost her $250 out of pocket. She had to give up on actively seeking treatment.

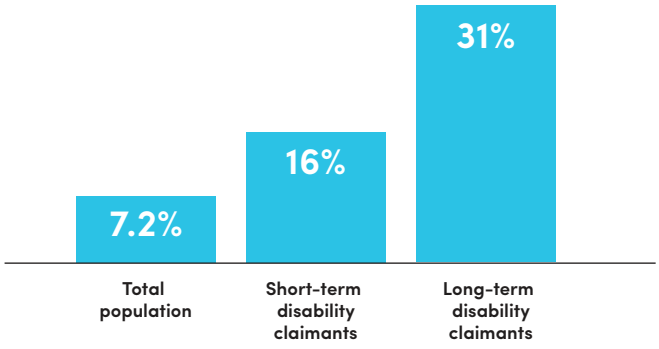
Insomnia & Employer Disability Costs

Over the past decade, insurance companies have seen a rise in the number of disability claims for mental illness. Along with healthcare costs for self-insured US employers, disability is a leading cost driver for companies globally.

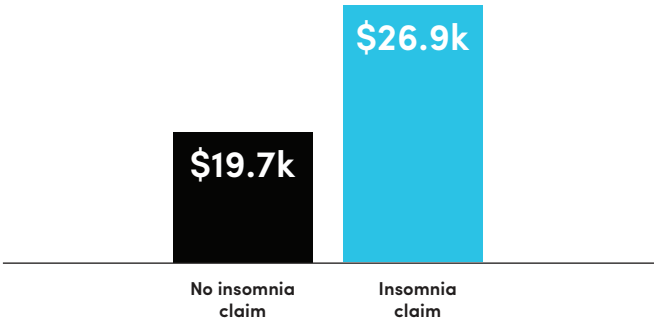
In a population based study of over 35,000 individuals, insomnia was found to be a strong predictor of work disability, and a significant risk factor.

We performed a disability analysis to determine the associated prevalence and costs of insomnia. The likelihood of an individual on disability to have insomnia was found to be much higher than the general population.

Prevalence of insomnia

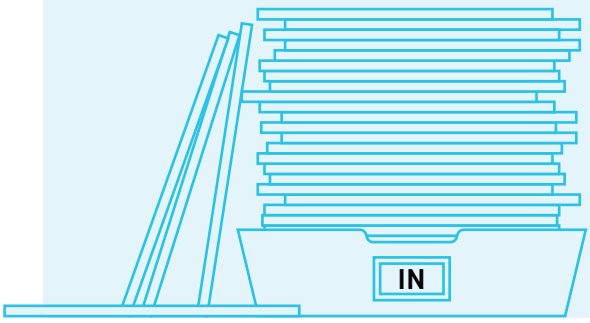


Long Term Disability



Individuals with insomnia are costing employers over $7,000 more each year than healthy individuals in long term disability costs

Laurie's Journey



Without treatment, Laurie's motivation, workplace performance, and sleep habits continued to get worse.

With her mood continuing to decline, she found it increasingly difficult to keep up with work, parenting, or any social life.

She felt that she had no choice but to file for Short Term Disability, and take time off from work for a while.

Productivity: Presenteeism & Absenteeism

In many companies, absenteeism and presenteeism costs have been shown to be even higher than healthcare expenditures - particularly with mental health.

On an annual basis, the US loses an equivalent of 1.23 million working days due to insufficient sleep.

Studies have shown that an employee suffering from insomnia loses over 11 days per year due to presenteeism and absenteeism, resulting in $3,275 of lost productivity costs per employee per year.

Across 10 employers, we set out to uncover the extent of the impact that poor sleep has on workplace productivity.

Over 75,000 employees completed a clinically validated sleep assessment, the Sleep Condition Indicator.

Individuals also answered questions about stress on the Perceived Stress Scale and questions on productivity and absenteeism on the Work Productivity and Activity Impairment Questionnaire.

The Results

Poor sleepers were found to be:

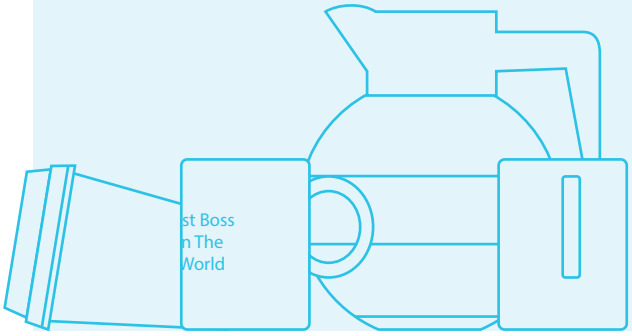
3.5x **less productive at work***

1.7x **as many work days missed due to sleep problems****

*Measured by the number of employees that reported that sleep impacted their productivity more than 1 day per week.

**Measured by the number of work hours per week that employees reported missing due to sleep problems.

Laurie's Journey



After 3 months, Laurie was finally able to return from being out on disability.

She was relieved to be back at work, but she realized that she was still struggling to stay alert on the task at hand.

Her lack of concentration was impacting her productivity at work, and her manager took notice and suggested she take a closer look at the available employee benefits.

Insomnia & Mental Health

"Sleep problems are very common in people with mental health disorders, but for too long insomnia has been trivialized as merely a symptom, rather than a cause, of psychological difficulties."

Daniel Freeman,
Professor of Clinical Psychology at Oxford

Evidence suggests that insomnia significantly impacts other mental health conditions.

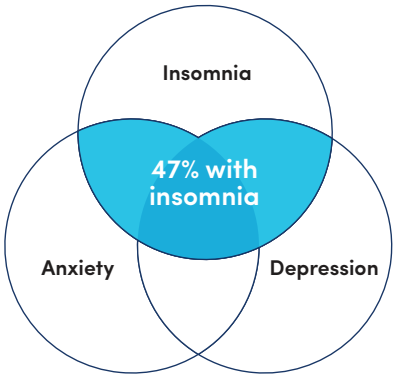
Typically two thirds of patients suffering from clinical levels of anxiety or depression also have insomnia. And it's not just that they overlap; studies suggest that sleep problems may directly contribute to the development of some psychiatric disorders.

We evaluated mental health related employee claims, and set out to determine the number of individuals with insomnia that were also found to have a medical diagnosis of anxiety or depression. In this analysis, we only looked at medical claims and did not analyze prescriptions related to depression or anxiety.

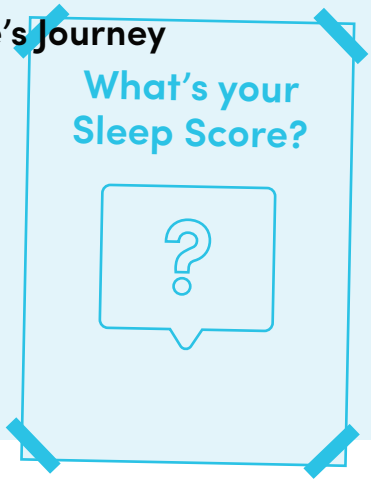
Given the variety of barriers such as stigma and access that can make treatment for anxiety and depression difficult, our finding of 47% overlap is a significant under representation of the state of mental health in employee populations; literature states that the overlap is 69%.

Poor sleepers were 3.7x more likely to be stressed

(n= 75,676 across 10 employers)



Laurie's Journey



While Laurie was in the break room, she saw a flyer for a digital sleep improvement program based on Cognitive Behavioral Therapy, and read that the program could also help with anxiety and depression.

She had been wondering about how much of her low mood was actually due to sleep problems.

The program was offered through Acme Corporation for free, so she figured she might as well try it, and took the Sleep Test.

The Sleep Solution

In light of the recent research highlighting the bidirectional relationship between sleep and mental health, medical professionals now consider sleep a high priority treatment target.

The first line treatment for sleep problems is called Cognitive Behavioral Therapy for Insomnia (CBT-I).

CBT-I programs are traditionally administered by medical professionals in person, but the lack of trained providers of CBT-I can make this treatment difficult to find - and if an individual does manage to find it, treatment can be expensive, and often not covered by insurance.

Luckily for employers, effective digital CBT-I solutions exist, and have been developed to act as a "trojan horse" for better mental health. Using sleep as a stigma-free way to address broader mental health conditions in a scalable, digital way, means higher engagement for employees and 24/7 access to care.

Since 2011, Big Health's first solution, Sleepio, has been the leading digital CBT-I program on the market and is supported by the most robust clinical evidence. It has been the subject of 30 research papers and 6 randomized-control trials demonstrating its efficacy.

Sleepio was shown to improve sleep in 76% of individuals in a placebo controlled study. In the largest ever randomized control trial of a mental health solution, Sleepio was shown to improve not only insomnia, but also had meaningful impacts on depression, anxiety, and overall emotional well-being.

Sleepio is available to

1.5m employees

65+ countries

10+ Fortune 500 companies

Laurie's Journey

After using the program Sleepio for just a few days, Laurie was already seeing improvements in her sleep.

She realized that the root of her mood problems was due to her insomnia and that her previous depression diagnosis was likely incorrect.

After a few weeks, her sleep had dramatically improved by over an hour per night, and as a result her mood and workplace productivity were at all time highs. Laurie finally felt like she was back to her true, happy self with good mental health.

About Big Health

Big Health creates fully automated behavioral medicine programs that are as scalable as drugs, yet able to deliver outcomes comparable to in-person therapy.

Big Health's first product, Sleepio, is a digital sleep improvement program featuring Cognitive Behavioral Therapy (CBT) techniques designed by Professor Colin Espie (University of Oxford). In addition to helping sufferers make the changes necessary to overcome insomnia, it also acts as a stigma-free "trojan horse" to help improve anxiety and depression at population scale.

With offices in London and San Francisco, Big Health's products are now being used by large multinational employers and major health plans to help improve the sleep and mental health of over 1.5 million people.

For more information on Big Health and Sleepio please visit bighealth.com

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