

# COMBATTING THE COST OF PRESENTEEISM

Unmind delivers estimated cost savings of \$11,330 to \$14,623 a year, for each employee using content to support their mood or sleep.

## The cost of poor mental health at work

The World Economic Forum reports that by 2030, the global costs of mental health problems will total over \$6 trillion<sup>1</sup>. When employees suffer from poor mental health at work, companies pay for it through numerous direct and indirect costs. \$11.0 billion, or \$431 per person, was spent on mental health-related services in Australia during 2019–20, a real increase from \$409 per person in 2015–16<sup>2</sup>. Poor mental health is estimated to cost the Australian economy \$60 billion per year<sup>3</sup>, \$12.8 billion of which is associated with workplace mental ill-health<sup>4</sup>. Among employees in Australia, psychological distress has been found to be associated with an over 300% increased risk of presenteeism (that's lost productivity due to mental ill-health)<sup>5</sup>, and is estimated to account for \$5.9 billion in reduced productivity per year<sup>6</sup>.

Two key causes of presenteeism are depression and poor sleep. Depression affects 322 million people globally and, according to the World Health Organisation, is the largest contributor to disability worldwide<sup>7</sup>. Untreated depression results in over 6 million working days lost each year in Australia<sup>8</sup>, and employees with unresolved depression are reported to experience an estimated 35% reduction in productivity<sup>9</sup>.

Poor sleep is another widely experienced problem, with nearly half (48%) of all Australian adults reporting at least 2 sleep-related problems, and nearly one-quarter (23%) reporting that their typical weekday routine does not allow them to get enough sleep<sup>10</sup>. Lost productivity due to poor sleep is estimated to cost the Australian economy \$17.9 billion per year<sup>11</sup>, or \$2,418 per person with inadequate sleep, and 29% of adults report making errors at work due to sleepiness or sleep problems<sup>12</sup>.

The need to improve wellbeing and productivity – while tackling the vast financial burden that depressive symptoms and sleep problems put on employers – is obvious. But doing so requires making effective interventions freely available to working adults.

## Unmind provides evidenced-based tools for mental health

Unmind is a digital platform that provides a range of tools designed to help employees measure, manage and improve their mental health and wellbeing. Two separate randomised controlled trials (RCTs), conducted in collaboration with the University of Sussex, have evaluated the impact of brief interventions available on the Unmind platform for **depressive symptoms**<sup>13</sup> and **poor sleep**<sup>14</sup>.

The first trial evaluated three brief evidence-based courses designed to tackle low mood in 405 UK working adults experiencing depressive symptoms. Participants were randomly allocated to one of the three Unmind courses, or a control group that did not have access to the Unmind platform. Participants in the intervention groups had three weeks to complete six to eight brief sessions, totalling around one-hour of content on the app, and were followed up for a further 4 weeks. The study provided evidence that these interventions effectively reduce symptoms of depression, as well as other mental health outcomes. What's more, this improved rates of presenteeism.

The second study evaluated tools intended to improve sleep among 300 UK working adults experiencing poor sleep. Participants used tools before bed, or to help get back to sleep during the night. Of the 300 individuals, 200 were randomly allocated one of two sets of Unmind tools, with the other 100 in a control group (without access to Unmind). On average, participants used the tools approximately three times a week for a four-week period. The study provided evidence that using the tools improves sleep quality, and reduces sleep-related impairment, presenteeism, and other mental health problems.

In this report, we evaluate the economic impact of the reductions in presenteeism identified in each of these studies and estimate the cost saving for employers.

## Our economic analysis

In both studies, we measured presenteeism using the Work Productivity and Activity Impairment (WPAI) questionnaire; a validated six-item, self-report measure of health-related work productivity loss for the **working population**<sup>15</sup>. For the analyses reported here, we compared the change in presenteeism from the start to the end of each study, between those who had access to the Unmind platform and those who did not (control group participants).

We calculated presenteeism costs by multiplying the number of hours of lost productivity by the average hourly wage in Australia, based on a 38 hour work week and an average hourly rate of \$46.57, as reported by Fairwork and the Australian Bureau of Statistics (ABS).

# Financial results

## DEPRESSION STUDY SAMPLE

Presenteeism was at an average of 41% for all participants before using Unmind, showing the considerable impact that symptoms of depression can have on productivity. For participants with access to the Unmind platform, this dropped to 28.7%. The control group – who did not have access to Unmind – saw a much smaller reduction to 38.5%.

Per full-time employee with access to Unmind, this equates to a weekly cost saving of \$217.89. Among the control group, the small change in presenteeism meant a \$55.46 saving per employee, per week. Given mental health problems commonly fluctuate over time – even without intervention – this degree of change is expected.

## SLEEP STUDY SAMPLE

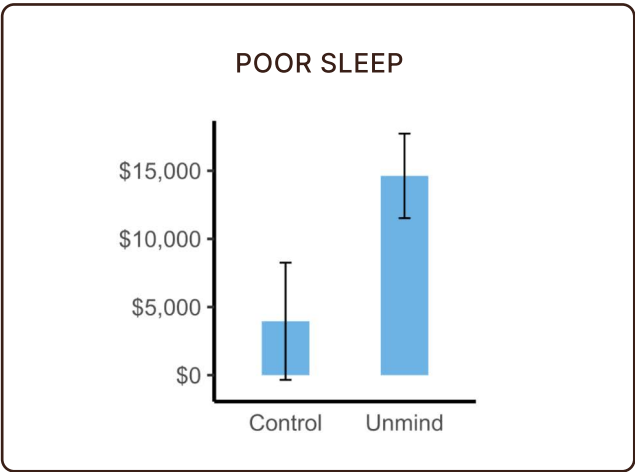
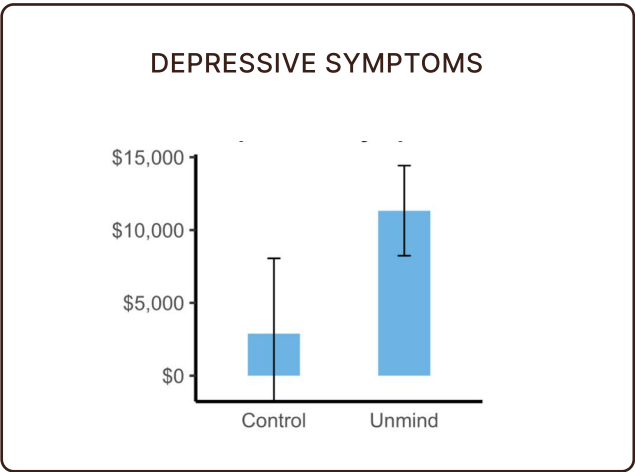
For sleep study participants, the average reported rate of presenteeism was 43.7% before using Unmind. Post-study, this reduced to 27.2%. As expected, presenteeism remained high for the control group (40.8%).

The estimated weekly cost saving, per employee with access to Unmind, equates to \$174.47. This is far greater than the much smaller reduction (\$47.18) for those without.

## ESTIMATED ANNUAL SAVINGS

Stretch these improvements in productivity across a year, and the estimated cost savings – per each employee using Unmind – are vast. Using Unmind to help employees tackle depressive symptoms saves \$11,330.28 per person, whereas using Unmind to help tackle poor sleep nets an even greater saving: \$14,623.47.

These savings compared to no use of Unmind are shown in the figure below\*.



\*error bars show 95% confidence intervals

# Conclusions

Lost productivity from poor mental health causes a substantial financial burden for employers. These findings demonstrate that Unmind can effectively support the mental health and wellbeing of employees, helping businesses to create happier, more productive teams, while reducing presenteeism and boosting performance.

It's clear that investing in employee mental health and wellbeing isn't just human altruism, it's smart economics too.

At Unmind, we're in the 5% of mental health apps being evaluated in high-quality studies<sup>16,17</sup>, because we really care about positive outcomes for our users. This report reflects on the impact of our low mood and sleep tools, but we're continually evaluating the efficacy of many aspects of our platform.

You can learn more about the Science behind Unmind and our studies in progress at [\*\*www.unmind.com/research-lab\*\*](http://www.unmind.com/research-lab).

To find out more about how you could boost business performance and drive measurable mental health and wellbeing outcomes for your employees with Unmind, [\*\*book a consultation with an Unminder today\*\*](#).

To account for variability in the data, we also calculated confidence intervals. The weekly cost saving estimates for the depression study sample ranged from \$158.42 - \$277.37 for the group with access to Unmind. In the sleep study sample, the range was \$221.58 - \$340.86 for the group with access to Unmind.

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# References

1. Bloom, D.E., et al. The Global Economic Burden of Noncommunicable Diseases. (2011).
2. AIHW. Mental Health Services in Australia: Expenditure on mental health-related services. (2022).
3. Royal Australian and New Zealand college of Psychiatrists. (2016).
4. Mental Health Australia & KPMG. Investing to Save: The Economic Benefits for Australia of Investment in Mental Health Reform. (2018).
5. Holden, L., et al. Which health conditions impact on productivity in working Australians? J. Occup. Environ. Med. (2011), 53, 253–257.
6. Hilton, M.F., Scuffham, P.A., Vecchio, N., Whiteford, H.A. Using the interaction of mental health symptoms and treatment status to estimate lost employee productivity. Aust. N. Z. J. Psychiatry, (2010), 44, 151–161.
7. WHO. Depression and other common mental health disorders: global health estimates. (2017).
8. Workplace Mental Health Institute. Mental Health Statistics for the Financial Services Industry. <https://www.wmhi.com.au/mental-health-statistics/>
9. McLean Hospital. Mental Health in the Workplace - What Employers Need to Know. (2022).
10. Adams, R. Appleton, S. Taylor, A. McEnvoy, D. Antic, N. Report to the Sleep Health Foundation 2016 Sleep Health Survey of Australian Adults. Adelaide: The University of Adelaide, The Adelaide Institute for Sleep Health. (2017).
11. Sleep Health Foundation. Asleep on the job: Costs of inadequate sleep in Australia. (2017).
12. Adams, R. et al. Sleep Health of Australian Adults In 2016: Results of the 2016 Sleep Health Foundation National Survey, Sleep Health, Volume 3, Issue 1, 2017, Pages 35-42, ISSN 2352-7218.
13. Taylor, R. W., Male, R., Economides, M., Bolton, H. & Cavanagh, K. Feasibility and preliminary efficacy of digital interventions for depressive symptoms in working adults: a multi-arm randomised pilot trial. Under Review, (2022).
14. Economides, M., Male, R., Bolton, H. & Cavanagh, K. Feasibility and preliminary efficacy of mobile tools to improve sleep quality in working adults with poor sleep: a multi-arm randomized pilot trial. Under Review, (2022).
15. Reilly, M. C., Zbrozek, A. S. & Dukes, E. M. The Validity and Reproducibility of a Work Productivity and Activity Impairment Instrument: PharmacoEconomics 4, 353–365, (1993).
16. Lau, N. et al. Android and iPhone Mobile Apps for Psychosocial Wellness and Stress Management: Systematic Search in App Stores and Literature Review. JMIR Mhealth Uhealth, (2020), 22;8(5):e17798.
17. Marshall, J. M., Dunstan, D. A. & Bartik, W. Apps With Maps—Anxiety and Depression Mobile Apps With Evidence-Based Frameworks: Systematic Search of Major App Stores. JMIR Ment Health, (2020), 7:e16525.