

World-leading research on predictive depression factors

AIA Australia supported by Quantum Health



HEALTHIER, LONGER,
BETTER LIVES



At AIA Australia our purpose is to **Make a Difference** in People's Lives. We pursue our dream of championing Australia and New Zealand to be the healthiest and best protected nations in the world by helping people live healthier, longer, better lives.

As a life and health insurer operating across 19 countries in the Asia-Pacific, AIA is committed to better understanding the factors that impact mental health and to working to improve mental wellbeing both earlier on and more effectively.

With depression, anxiety and substance use disorders being the most common mental health conditions in Australia, AIA Australia has partnered with Quantum to complete the world's largest and richest study of the link between depression, demographics, health, lifestyle and circumstance.

ABOUT THE STUDY

The objective of the study by AIA Australia and Quantum was to identify whether it is possible to predict the risk of depression using demographic, behavioural and environmental factors. The intention of the study was to shed light on complex problems and identify solutions that could be implemented by professionals and affected individuals.

The study combined a literature review of the connection between depression and behaviour, as well as analyses of health claim data and biometric-tracked physical activity data — including steps, heart rate and exercise type — sourced from health insurer Discovery Health and wellbeing program Vitality in South Africa. This rich dataset offered a unique source of insights into health and behavioural characteristics that can be used to understand depression risk.

In total, the initial dataset that was investigated covers a population of over five million lives, including healthcare claims incurred over 10 years, equating to 1.5 billion lines of claims and activity data.

The South African population that has health insurance was seen to have similar enough demographics to Australia for the findings to be seen as reasonable for Australians.

Implications for the Australian population

Our research suggests that if the Australian population could practise at least average health habits, the national depression incidence rate could reduce from 6% to 4.7%.

Such a reduction would result in 300,000 fewer depression incidences, leading to 4.7 million recovered working days and saving the Australian economy around \$3 billion per annum.

KEY FINDINGS

The most important factors found to drive higher depression risk include:

- unhealthy lifestyle choices, including smoking, lack of exercise and high levels of sugar consumption
- high levels of stress and insomnia
- higher levels of health problems
- days off work for illness.

In general, the study substantiates commonly accepted truths that healthier choices (e.g. more exercise, less unhealthy food, not smoking) and happier circumstances (e.g. less stress, fewer sleeping problems, less personal or family illness) contribute to lower depression rates.

These include:



Depression rates in women being **ALMOST DOUBLE** that of men.

People who have previously been diagnosed with depression being re-diagnosed at rates **20 TIMES** higher than those who have never been diagnosed.

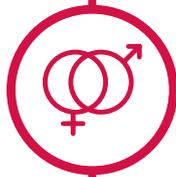
The rate of depression increasing **1.5 TIMES** among those who have a very ill family member.

Depression risk factors

Non-controllable risk factors:

70% of depression risk is linked to factors outside the individual's control. Key insights from the study relating to these factors include:

GENDER – Females have a higher depression risk than males.



AGE – While older individuals in the dataset were more likely to be depressed, this is explained by non-age features such as stress and comorbidities.



ILLNESS – Individuals facing health concerns have an increased risk of suffering from depression, including when a family member has a serious illness.



Controllable risk factors:

30% of depression risk is linked to factors within the individual's control. Key insights from the study relating to these factors include:

EXERCISE LEVELS (64%) – People who do more exercise, or who do it at a higher intensity, have lower risks of depression. Those who take 10,000+ steps per day have been found to have half the depression rate of those who take 2,000 or less.



SLEEP PATTERNS (16%) – People who sleep less than four hours a night have 32 per cent higher depression rates than those who sleep **seven to eight hours**.



DIET (14%) – People who consume three or more **sugary drinks** per day increase their risk of depression by 11 per cent.



SMOKING AND ALCOHOL (6%) – Current and ex-smokers have a 23 per cent higher risk of depression than non-smokers. Excessive drinking* increases depression risk by 14 per cent**.



*defined as the person experiencing guilt about their drinking behaviour.
 ** for people who have a history of depression.

Key insights from the study are highly instructive to people at risk of depression, and to health providers and funders. They could assist with:

- defining of risk factors for depression, including early stage factors
- identifying people with the highest risk, and
- providing additional evidence for supporting interventions that are more likely to be effective among these populations.

The depression-risk algorithm developed through this study can be used to power programs that engage individuals and improve mental wellbeing by targeting the controllable risk factors and making people aware of the support available if uncontrollable risk factors are high. Not only do these controllable factors represent over a quarter of the impact on depression risk, they can also be improved by intervention and incentivisation. The potential opportunity is significant – by addressing the grassroots of mental health issues and looking at it at a behavioural level, we will be able to improve the wellbeing of the wider community.



AIA'S COMMITMENT

AIA Australia's commitment to making a difference in mental health spans the continuum, from prevention to treatment. This research can help shift efforts upstream to mental health promotion, prevention and early intervention.

At AIA Australia we believe we have a social responsibility, as underpinned by our shared-value approach, to help people improve their health. This research is one step along the path to better outcomes for our customers and the broader community. And it's one that will require ongoing advocacy and collaboration.

We hope this inspires collaboration and commitment across sectors and the community, to act on the opportunities that a focus on prevention can provide in transforming Australia's mental health landscape.