

# UPDATED MENTAL HEALTH FINDINGS FROM CHRONIC CARE AUSTRALIA

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## THE MENTAL AND PHYSICAL BENEFITS OF A 12-WEEK EXERCISE MEDICINE PROGRAM USED AS A COMPLEMENTARY TREATMENT TO PHARMACEUTICAL & PSYCHOLOGICAL INTERVENTIONS. THE LATEST REAL WORLD FINDINGS FROM CHRONIC CARE AUSTRALIA.

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### Background

Chronic Care Australia (CCA) is conducting an ongoing real world observational study looking at the mental and physical benefits of specific 12-week exercise medicine programs. Local GPs and psychiatrists refer participants to CCA. Our findings offer enlightening insights into the important role value-based exercise medicine programs can play as part of the treatment and management of mental illness.

#### Findings are in line with recent research noting that:

- Cardiometabolic diseases are the leading cause of premature mortality for those living with severe mental illness (1).
- Life expectancy is up to 15 years less in those living with mental illness in comparison to the general population (2).
- There is significant research to support the benefits of physical activity for mental illness, including reducing cardiometabolic risk factors, reduced psychiatric symptoms, improved cognitive functioning and increased psychosocial functioning (2).
- Suicide is the leading cause of death for serving and ex-serving Australian Defence Force (ADF) men, aged 16-49 years. Coronary heart disease is the leading cause of death for those aged 50+ years (4).
- Ex-serving men under the age of 30 years had a suicide rate 2.2 times higher than the average Australian population of the same age (4).
- Half of those serving in the ADF will experience a mental disorder in their lifetime. Compared to the average Australian population they are (4):
  - **1.8 times** as likely to experience PTSD
  - **1.7 times** as likely to experience depression
- **75%** of men who served in the ADF are at increased risk of metabolic complications, due to an increased waist circumference (4).
- For the population aged 18-54 years, 1 in 5 hospitalisations were for anxiety disorders. ADF personnel were three times more likely than the average Australian to be hospitalised for back pain (4).
- The prevalence of PTSD in the emergency service and frontline worker population is high with the following estimates meeting PTSD criteria (5):
  - **1 in 10** active emergency service workers
  - **1 in 6** retired emergency personnel
  - **1 in 5** frontline health workers
  - **1 in 6** emergency doctors
- Not all individuals with PTSD benefit from the standard treatment of care involving cognitive behavioural therapies and pharmacotherapy. Such treatments can be limited due to cost, availability and stigma (5).

- Pharmaceutical treatments often don't address the physical health conditions accompanying PTSD, including diabetes, hypertension and metabolic syndrome (5).

*With a move towards value-based health care models that consider the whole health needs of the clients, these observations explore the real world opportunities to:*

- Address the implementation gap by making Exercise Physiology services more accessible to those living with mental illness (1).
- Support the Equally Well Consensus Statement – Improving the quality of life of people living with mental illness by providing equity of access to quality health care (3).
- Improve overall mental and physical health perceptions (5).
- Prevent the impact and burden of chronic mental and physical conditions across one's lifespan (5).
- Support the Department of Veteran Affairs' Veteran Mental Health and Wellbeing Strategy and National Action Plan (2020-2023), which aims to enable a shift from illness-based to wellness-focussed healthcare by ensuring the appropriate services are made available to those transitioning to civilian context for them to live and age well (6).
- Reduce Veteran hospitalisations and ongoing health costs (6).
- Empower clients to self-manage their health by seeking guidance where required (6).



## Overview

100 clients presenting with a primary mental health condition, referred by local GPs, psychiatrists and other health professionals. These clients engaged in an 8 or 12-week program, attending one to three times per week, and had more than one outcome measure recorded throughout this time.

### Outcome measures included:

- + Depression Anxiety Stress Scales (DASS21)
- + Perceived Personal Health Assessment

As part of the **4-point MEDEX™** protocol, every exercise program prescription included mental readiness, physical readiness, strength work and cardiovascular exercise.

Of the 100 clients, 18 commenced one session per week (1 did not complete), while 82 commenced two to three sessions per week (7 did not complete).

### A breakdown of secondary presenting physical conditions is as follows:

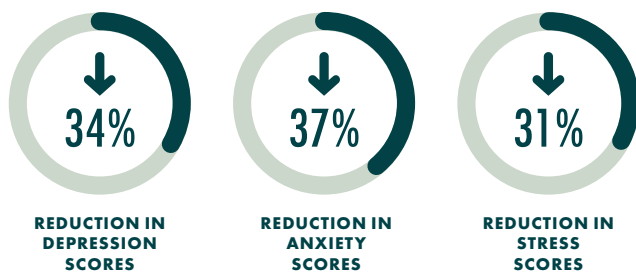
- 54%** = Musculoskeletal
- 15%** = Neurological/pain
- 21%** = Metabolic
- 9%** = Cardiovascular
- 6%** = Other (e.g. Chronic Fatigue, Women's Health)

**22% DID NOT PRESENT WITH A SECONDARY CONDITION, WHILE 24% PRESENTED WITH MORE THAN ONE SECONDARY CONDITION CATEGORY.**

## Results

Improvements in both Depression Anxiety Stress Scales (DASS21) and Perceived Personal Health Assessment Outcome Measures were greater and more consistent in the group who engaged in higher frequency of exercise medicine sessions (2-3x/week) compared to less frequent (1x/week).

### Those who attended 2-3x/wk experienced:



## Perceived Personal Health Assessment

### Those who attended 2-3x/wk experienced:

- 79%** improvement in self perceptions of health and wellbeing
- 69%** improvement in motivation to exercise
- 87%** improvement in perceived fitness
- 36%** increase in perceived happiness
- 11%** improvement in perceived sleep quality

## Specific Benefits Reported and Observed

### Physical and Psychosocial

Having access to an Exercise Physiologist allowed for regular check-ins. Each client's mental and physical presentation was assessed on a sessional basis, and the exercise medicine dose was tailored accordingly. Regular sessions were shaped around less frequent psychology and psychiatry appointments. The exercise medicine program also allowed for development of socialisation skills within a safe and supportive environment.



### Psychological

Significant improvements in Depression Anxiety Stress Scales (DASS21) outcomes as well as mental health related perceived health outcomes.



### Cardiovascular

For many, cardiovascular exercise prescription allowed for not only an improvement in fitness and perceived body weight, but also a tool for decompressing.



### Pathology Specific Symptoms

Results across the 12-week program were significantly greater and maintained for those individuals who attended 2-3x/week compared to 1x/week. Greater routine with exercise adherence was established, creating more consistent mental and physical health improvements.



## Conclusion

Developing effective team care arrangements with stepped care interventions generates higher healthcare value outcomes (mentally and physically) for Veterans, first responders, and other individuals living with mental illness. This makes both operational and health economic sense, and helps to reduce the implementation gap. Structuring a client's treatment process to increase the collective healthcare value of their outcomes by treating all elements of their health journey in one place - allows improved treatment outcomes and better pathways towards greater self-efficacy and self-management. The inclusion of an exercise medicine program in the management and treatment of Veterans, first responders and individuals living with mental illness, supports specialists and GPs in their ability to determine the need for effective adjuvant pharmaceutical intervention. For Veterans, in particular, it allows their body to be decommissioned and rebuilt for personal use, allowing them to adapt to their non-service life, self-care responsibilities and long-term needs in a civilian context.

## References

*Embedding exercise interventions as routine mental health care: Implementation strategies in residential, inpatient and community settings (2017):* <https://pubmed.ncbi.nlm.nih.gov/28585448/>; *The Lancet Psychiatry Commission: A blueprint for protecting physical health in people with mental illness (2019):* [https://www.thelancet.com/pdfs/journals/lanpsy/PIIS2215-0366\(19\)30132-4.pdf](https://www.thelancet.com/pdfs/journals/lanpsy/PIIS2215-0366(19)30132-4.pdf); *Equally Well National Consensus Statement: Improving the physical health and wellbeing of people living with mental illness in Australia (2016):* <https://www.equallywell.org.au/wp-content/uploads/2018/12/Equally-Well-National-Consensus-Booklet-47537.pdf>; *A profile of Australia's veterans (2018):* <https://www.aihw.gov.au/getmedia/1b8bd886-7b49-4b9b-9163-152021a014df/aihw-phe-235.pdf.aspx?inline=true>; *Exercise and PTSD Symptoms in Emergency Service and Frontline Medical Workers: A Systematic Review:* [https://journals.lww.com/acsm-tj/Fulltext/2022/01140/Exercise\\_and\\_PTSD\\_Symptoms\\_in\\_Emergency\\_Service.8.aspx](https://journals.lww.com/acsm-tj/Fulltext/2022/01140/Exercise_and_PTSD_Symptoms_in_Emergency_Service.8.aspx); *Veteran Mental Health and Wellbeing Strategy and National Plan 2020-2023:* [https://www.dva.gov.au/sites/default/files/veteran\\_mh\\_wb\\_2020-2023.pdf](https://www.dva.gov.au/sites/default/files/veteran_mh_wb_2020-2023.pdf)