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# Consensus statement on the role of Accredited Exercise Physiologists within the treatment of mental disorders: a guide for mental health professionals

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## Abstract

**Objective:** The aim is to identify the role and scope of Accredited Exercise Physiologist (AEP) services in the mental health sector and to provide insight as to how AEPs can contribute to the multidisciplinary mental health team.

**Methods:** A modified Delphi approach was utilised. Thirteen AEPs with experience in mental health contributed to the iterative development of a national consensus statement. Six mental health professionals with expertise in psychiatry, mental health nursing, general practice and mental health research participated in the review process. Reviewers were provided with a template to systematically provide feedback on the language, content, structure and relevance to their professional group.

**Results:** This consensus statement outlines how AEPs can contribute to the multidisciplinary mental health team, the aims and scope of AEP-led interventions in mental health services and examples of such interventions, the range of physical and mental health outcomes possible through AEP-led interventions and common referral pathways to community AEP services.

**Outcome:** AEPs can play a key role in the treatment of individuals experiencing mental illness. The diversity of AEP interventions allows for a holistic approach to care, enhancing both physical and mental health outcomes.

**Keywords:** AEP, exercise, mental health, Accredited Exercise Physiologist, consensus statement

**M**ental illness represents the third highest disease burden, with nearly one-half of Australians experiencing mental illness at some stage.<sup>1</sup>

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Mental illness is associated with poor physical health, and people living with severe mental illness experience twice the risk of cardiometabolic diseases, including obesity, type 2 diabetes, metabolic syndrome and cardiovascular diseases (CVD)<sup>2</sup> contributing to a 15–20-year reduction in life expectancy.<sup>3</sup> Access to physical health care services may be less than optimal within mental health facilities, with service users often feeling their physical health is neglected once they are diagnosed with a mental illness, referred to as diagnostic overshadowing.<sup>4</sup>

The importance of improving the physical health of people living with mental illness has been identified in recent key policy documents. A 2015 report prepared by the RANZCP<sup>5</sup> titled *Keeping Body and Mind Together: Improving the physical health and life expectancy of people with serious mental illness* recommends that health promotion interventions, including exercise, should be tailored and integrated for delivery in all specialist mental health settings and as a core element of both in-patient and community facilities (page 6). The *Living Well: a strategic plan for mental health in NSW 2014–2024*<sup>6</sup> report identifies the priorities for the mental health system, and describes the need for urgent reform to ensure that the physical health of mental health consumers is appropriately addressed. There is growing interest in the role of physical activity interventions in contributing to improve the physical health of people living with mental illness.

Physical inactivity and poor cardiorespiratory fitness are key modifiable risk factors for all-cause mortality and morbidity in the general population,<sup>7</sup> and in people with mental illness. Psychotropic-induced weight gain, poor diet, smoking and substance misuse further contribute to the disease burden.<sup>8</sup> Compared with the general population, people living with mental illness display reduced cardiorespiratory fitness, are more sedentary and less physically active.<sup>9,10</sup> Furthermore, there is an increasing body of evidence regarding the efficacy and effectiveness of exercise interventions for improving mental health outcomes of people experiencing mental illness.<sup>11–15</sup> Interventions aimed at increasing physical activity and improving cardiorespiratory fitness are the cornerstone in preventing and treating CVD and associated mortality, and therefore should be included as part of the multidisciplinary treatment of mental illness, including for those with serious mental illnesses.<sup>16</sup>

As university-qualified allied health professionals, Accredited Exercise Physiologists (AEPs) are best placed to implement targeted lifestyle interventions incorporating physical activity to address modifiable risk factors and improve the overall health and well-being for people experiencing mental illness. AEPs are trained in providing evidence-based exercise interventions to individuals at high risk of developing, or with existing, chronic and complex medical conditions and injuries. Exercise & Sports Science Australia (ESSA) is the peak body providing national accreditation of AEPs. AEPs work in a range of private and public settings delivering clinical services to clients across the full

range of in-patient (acute) and community (sub-acute) settings, and qualify for provider status under Medicare Australia, the Department of Veterans' Affairs and most private health insurers and compensation schemes.<sup>17</sup>

AEPs have experience and expertise in the assessment, design, and delivery of exercise and behaviour-change interventions, with particular focus on those living with, or at risk of, chronic conditions including mental illness. A recent report by Deloitte Access Economics (*Value of Accredited Exercise Physiologists in Australia, 2015*)<sup>18</sup> identifies the economic benefits offered by utilising AEP services across a range of areas, including diabetes and mental health. AEPs represent a growing workforce within the mental health sector, with increasing opportunities for employment and referral.<sup>19,20</sup>

Given the emerging role of AEPs in health care, and the increased awareness of the benefits of exercise in the prevention and treatment of a range of mental disorders, the aims of this consensus statement are to:

- define the scope and capacity of AEPs practising in the mental health sector;
- raise awareness of AEP services and identify available referral pathways;
- describe the benefits of AEP interventions for individuals utilising mental health services.

## Methods

The Delphi technique was used with four rounds of review. The first round included a working group of six AEPs who identified eight priority areas for inclusion on the AEP consensus statement. Feedback was sought on this document from a secondary working group including a further seven AEPs with expertise in mental health. A review template was provided which allowed the expert group (consisting of 13 AEPs Australia wide) to contribute and provide feedback in a structured format. All content included under each item was reviewed and approved by all participants. Additional comments were applied if they were (1) relevant and (2) supported by evidence. A third round of reviewing and consultancy was then conducted with six mental health professionals from various fields, including psychiatry, nursing, general practice, research and a consumer advocate. The final round included an expert research committee at ESSA who reviewed the content and provided feedback. The final document was then distributed to the AEP expert panel for a final review.

## Results

Four items were identified as priority for inclusion in the consensus statement: (i) the scope of AEP in the mental health sector; (ii) modes of delivery; (iii) the likely benefits to service users associated with the utilisation of AEP interventions; and (iv) referral pathways. Key items are detailed below.

## Scope of AEP interventions in Mental Health

AEPs design and deliver individualised lifestyle modification programs that are both achievable and sustainable. This is achieved through empowering individuals towards greater independence and self-management of their per-

### Box 1. Scope of AEP interventions

AEPs working in mental health:

- have an understanding of psychopathology and indications for initiating referral to mental health clinicians, i.e. changes in symptomatology or functioning;
- acknowledge the unique barriers to participation in physical activity including symptomatology and side effects of medication;
- utilise evidence-based strategies to maximise participation, including: rapport building, barrier identification, motivational interviewing, education and goal setting;
- understand the relative and absolute contraindications to exercise testing and participation;
- understand the roles of other members of the multidisciplinary mental health team, and work in liaison to provide a holistic approach to person-centred care.

sonal health and well-being. Despite increasing evidence regarding the benefits of exercise interventions for people experiencing mental disorders, AEPs remain an underutilised resource within mental health services.<sup>21</sup>

## What do AEP-led interventions within mental health services comprise?

### Box 2. Aims of AEP-led interventions

Aims

- Improve physical health and reduce cardiometabolic risk, including prevention of psychotropic-induced weight gain.<sup>22</sup>
- Contribute to the mental health team through a person-centred approach incorporating recovery and strength-based models to achieve client-specific health-related goals and in line with the principles of shared decision making.
- Promote 'Healthy Active Lives' for people experiencing mental illness, to achieve the physical activity targets outlined in the *HeAL* declaration,<sup>23</sup> developed by an international working group comprising clinicians, researchers and consumers, which was endorsed in 2014 by ESSA (more information at <http://www.iphs.org.au/>).

### Box 3. Examples of AEP-led interventions

- Provide individualised lifestyle counselling, exercise programming and supervision informed by clinical outcomes including cardiometabolic health, aerobic fitness, strength and functional capacity, injury limitations, symptoms and/or other comorbidities.
- Facilitate group-based exercise programs.
- Conduct exercise and functional capacity assessments.
- Deliver individual or group-based education regarding the benefits of physical activity.
- Incorporate health coaching techniques such as motivational interviewing, physical activity education sessions (individual or group based) regarding the benefits of physical activity, and goal-setting strategies to encourage effective and sustainable behaviour change.
- Work as part of a multidisciplinary team to conduct and promote regular physical health screening and metabolic monitoring (body weight, body mass index, waist circumference, and blood pressure)<sup>5</sup> as part of standard care and in line with treatment guidelines.<sup>24,25</sup>
- Provide basic healthy eating advice, in line with the current Australian Dietary Guidelines,<sup>26</sup> ensuring collaboration with and referral to a dietitian where appropriate and possible.
- Provide in-service training for the mental health workforce on the implementation of exercise and physical activity in mental health settings, including training the existing workforce to deliver interventions in the absence of AEPs.

## Targeted health outcomes of increasing physical activity and exercise participation

AEPs apply clinical skills and knowledge to increase physical activity and exercise participation among mental health consumers to achieve a range of positive outcomes as outlined in Boxes 4 and 5.

Research to date has focused on interventions for youth and adult populations; however, it is acknowledged that there is scope for further implementation and evaluation of AEP interventions for other populations, including children and older adults experiencing mental illness.

## Referral pathways to community-based AEP services

AEPs are currently an underutilised resource in the treatment of individuals experiencing mental health issues. There are currently three pathways available for mental health consumers to be referred to an AEP (refer to Box 6).

#### Box 4. Physical health outcomes

Regular physical activity is associated with a range of positive physical health outcomes. Specific to populations with mental illness, physical activity has been shown to:

- reduce risk of all-cause mortality;<sup>16</sup>
- reduce cardiometabolic risk defined as clinically significant weight loss or improvement in cardiorespiratory fitness;<sup>27</sup>
- attenuate medication-induced weight gain;<sup>22,24,25,27</sup>
- improve chronic disease outcomes, i.e. for those with type 2 diabetes and CVD.<sup>26</sup>

#### Box 5. Mental health outcomes

Regular physical activity is associated with a range of positive mental health outcomes listed below.

- Decrease symptoms of depression, anxiety, stress and schizophrenia<sup>11,12,15</sup>
- Improve sleep quality.<sup>28</sup>
- Decrease social isolation.<sup>29</sup>
- Increase engagement with treatment and service utilisation.<sup>16,22</sup>
- Reduce cravings and withdrawal in substance use disorders and alcohol addiction.<sup>30,31</sup>
- Improve quality of life.<sup>11,32</sup>
- Increase self-esteem.<sup>33</sup>

There is a growing body of evidence supporting the association between cardiorespiratory fitness with improved psychosocial function, i.e. activities of daily living, social and occupational functioning;<sup>34</sup> however, further prospective research is needed in this area.

#### Box 6. Referral pathways

1. Medicare Chronic Disease Management Plan (formerly Enhanced Primary Care or EPC) – For patients with chronic and complex conditions, a General Practitioner can initiate a Team Care Arrangement and coordinate a treatment plan. Medical conditions may include cardiovascular diseases, obesity, diabetes or chronic musculoskeletal conditions, all of which are common comorbidities in patients with serious mental illness. A treatment plan can include referral to AEPs.<sup>19</sup>

For more information see: <http://www.health.gov.au/internet/main/publishing.nsf/Content/Chronic+Disease+Allied+Health+Individual+Services>

2. Discharge planning for transition from in-patient settings into community-based physical health services. For example, private practice AEPs, community-based mental health services that incorporate a physical health program or Community Managed Organisations such as New Moves (Schizophrenia Fellowship of NSW), The Personal Helpers and Mentors program (PHaMs), NEAMI and Young People's Outreach Program (Y-POP).

3. Direct referrals via private psychiatrists and other allied health professionals, e.g. psychologists, represent further opportunities for AEPs to contribute to the multidisciplinary health care team. Individuals who have private health insurance may be eligible for a rebate, as most private health insurers recognise AEP services.

#### Limitations

AEPs with expertise in mental health were invited to contribute to the expert panel. Although every effort was made to include representation from AEPs working in a variety of settings, it is acknowledged a more robust process of identifying eligible AEPs could be utilised in future adaptations.

#### Conclusion

The evidence supporting the inclusion of physical activity as an integrated component of routine treatment for mental disorders is clear. AEPs are well placed to provide evidence-based physical activity and exercise interventions for people with mental illness in a variety of settings. As outlined in the *Contributing Lives, Thriving*

*Communities and RANZCP Keeping Body and Mind Together* report, there is a need for reform regarding the physical health care of the most vulnerable members of society: mental health consumers. Incorporating AEPs within the multidisciplinary mental health team will play a key role in enhancing both physical and mental health outcomes for individuals experiencing mental illness.

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## References

1. Australian Bureau of Statistics. *Australian health survey: first results 2012*. cat. no. 1307.84364.0.55.001. Canberra: ABS, 2012.
2. Vancampfort D, Stubbs B, Mitchell AJ, et al. Risk of metabolic syndrome and its components in people with schizophrenia, bipolar and major depressive disorders: a large scale meta-analysis of 198 studies. *World Psychiatry* 2015; 14: 339–347.
3. Lawrence D, Hancock KJ and Kisely S. The gap in life expectancy from preventable physical illness in psychiatric patients in Western Australia: retrospective analysis of population based registers. *BMJ* 2013; 346.
4. Dean J, Todd G, Morrow H, et al. Mum, I used to be good looking... look at me now': the physical health needs of adults with mental health problems: the perspectives of users, carers and front-line staff. *Int J Mental Health Promot* 2001; 3: 16–24.
5. The Royal Australian and New Zealand College of Psychiatrists. *Keeping Body and Mind Together: Improving the physical health and life expectancy of people with serious mental illness*. Melbourne: The Royal Australian and New Zealand College of Psychiatrists, 2015.
6. NSW Mental Health Commission. *Living Well: A Strategic Plan for Mental Health in NSW 2014–2024*. Sydney: NSW Mental Health Commission, 2014.
7. Kodama S, Saito K, Tanaka S, et al. Cardiorespiratory fitness as a quantitative predictor of all-cause mortality and cardiovascular events in healthy men and women: a meta-analysis. *JAMA* 2009; 301: 2024–2035.
8. Galletly CA, Foley DL, Waterreus A, et al. Cardiometabolic risk factors in people with psychotic disorders: the second Australian national survey of psychosis. *Aust NZ J Psychiatry* 2012; 46: 753–761.
9. Soundy A, Wampers M, Probst M, et al. Physical activity and sedentary behaviour in outpatients with schizophrenia: a systematic review and meta-analysis. *Int J Ther Rehabil* 2013; 20: 588–596.
10. Vancampfort D, Guelinckx H, Probst M, et al. Associations between metabolic and aerobic fitness parameters in patients with schizophrenia. *J Nerv Ment Dis* 2015; 203: 23–27.
11. Rosenbaum S, Tiedemann A, Sherrington C, et al. Physical activity interventions for people with mental illness: a systematic review and meta-analysis. *J Clin Psychiatry* 2014; 75: 964–974.
12. Stanton R and Reaburn P. Exercise and the treatment of depression: a review of the exercise program variables. *J Sci Med Sport* 2014; 17: 177–182.
13. Stanton R and Happell B. A systematic review of the aerobic exercise program variables for people with schizophrenia. *Curr Sports Med Rep* 2014; 13: 260–266.
14. Rebar AL, Stanton R, Geard D, et al. A meta-meta-analysis of the effect of physical activity on depression and anxiety in non-clinical adult populations. *Health Psychol Rev* 2015; (accepted): 1–78.
15. Firth J, Cotter J, Elliott R, et al. A systematic review and meta-analysis of exercise interventions in schizophrenia patients. *Psychol Med* 2015; 45: 1343–1361.
16. Vancampfort D, Rosenbaum S, Probst M, et al. Promotion of cardiorespiratory fitness in schizophrenia: a clinical overview and meta-analysis. *Acta Psychiatr Scand* 2015; 132: 131–143.
17. Exercise Sports Science Australia. *Exercise Sports Science Australia Accredited Exercise Physiologist (AEP) Scope of Practice. Secondary Exercise Sports Science Australia Accredited Exercise Physiologist (AEP) Scope of Practice 2014*, [https://www.essa.org.au/wp-content/uploads/2011/08/AEP-Scope-of-Practice\\_Final-September-2014.pdf](https://www.essa.org.au/wp-content/uploads/2011/08/AEP-Scope-of-Practice_Final-September-2014.pdf). (2014, accessed 30 October 2015).
18. Deloitte Access Economics. *Value of Accredited Exercise Physiologists in Australia, 2015*. Deloitte.
19. Stanton R, Rosenbaum S, Kalucy M, et al. A call to action: exercise as treatment for patients with mental illness. *Aust J Primary Health* 2015; 21: 120–125.
20. Rosenbaum S, Tiedemann A, Stanton R, et al. Implementing evidence-based physical activity interventions for people with mental illness: an Australian perspective. *Australas Psychiatry* 2016; 24: 49–54.
21. Stanton R. Accredited exercise physiologists and the treatment of people with mental illnesses. *Clin Pract* 2013; 2: 5–9.
22. Curtis J, Watkins A, Rosenbaum S, et al. Keeping the body in mind: an individualised lifestyle and life-skills intervention to prevent antipsychotic-induced weight gain in first episode psychosis. *Early Interv Psychiatry* 2015; DOI: 10.1111/eip.12230.
23. Shiers D and Curtis J. Cardiometabolic health in young people with psychosis. *Lancet Psychiatry* 2014; 1: 492–494.
24. Ward MC, White DT and Druss BG. A meta-review of lifestyle interventions for cardiovascular risk factors in the general medical population: lessons for individuals with serious mental illness. *J Clin Psychiatry* 2015; 76: e477–e486.
25. Daumit GL, Dickerson FB, Wang N-Y, et al. A behavioral weight-loss intervention in persons with serious mental illness. *New Engl J Med* 2013; 368: 1594–1602.
26. Hordern MD, Dunstan DW, Prins JB, et al. Exercise prescription for patients with type 2 diabetes and pre-diabetes: a position statement from Exercise and Sport Science Australia. *J Sci Med Sport* 2012; 15: 25–31.
27. Bartels SJ, Pratt SI, Aschbrenner KA, et al. Clinically significant improved fitness and weight loss among overweight persons with serious mental illness. *Psychiatric Serv* 2013; 64: 729–736.
28. Rethorst CD, Sunderajan P, Greer TL, et al. Does exercise improve self-reported sleep quality in non-remitted major depressive disorder? *Psychol Med* 2013; 43: 699–709.
29. Richardson CR, Faulkner G, McDevitt J, et al. Integrating physical activity into mental health services for persons with serious mental illness. *Psychiatric Serv* 2005; 56: 324–331.
30. Giesen ES, Deimel H and Bloch W. Clinical exercise interventions in alcohol use disorders: a systematic review. *J Subst Abuse Treat* 2015; 52: 1–9.
31. Glass TW and Maher CG. Physical activity reduces cigarette cravings. *Br J Sports Med* 2014; 48: 1263–1264.
32. Schuch FB, Vasconcelos-Moreno MP, Borowsky C, et al. Exercise and severe major depression: effect on symptom severity and quality of life at discharge in an inpatient cohort. *J Psychiatr Res* 2015; 61: 25–32.
33. Krogh J, Nordentoft M, Sterne J, et al. The effect of exercise in clinically depressed adults: systematic review and meta-analysis of randomized controlled trials. *J Clin Psychiatry* 2011; 72: 529–538.
34. Vancampfort D, Guelinckx H, Probst M, et al. Aerobic capacity is associated with global functioning in patients with schizophrenia. *J Ment Health* 2015; 24: 214–218.