

The Role and Scope of Accredited Exercise Physiologists in the Australian Healthcare System

Neil A. Smart, PhD¹, Andrew Williams, PhD², Katie Lyndon, BSc³

ABSTRACT

Vocational opportunities for Australian Accredited Exercise Physiologists (AEPs) are expanding. Australians with chronic disease may be able to claim some of the healthcare costs associated with AEPs through Medicare. This document aims to explain the place of AEPs in the Australian healthcare system and related industries. *Journal of Clinical Exercise Physiology*. 2016;5(2):16–20.

Keywords: healthcare costs, allied health, scope of practice

INTRODUCTION

The vocational opportunities in Australia for Accredited Exercise Physiologists (AEPs) are extensive and expanding and arguably lead the world in the range of compensable services available compared to similar professions in other parts of the world. The AEP profession in Australia likely leads the world in terms of “freedom to act” as independent health practitioners. Recognition of the importance of achieving a sustained physically active lifestyle and the effectiveness of evidence-based exercise interventions for the prevention and management of chronic diseases have led to the inclusion of clinical exercise physiology services among other covered services in the Australian healthcare system (1). A precursor to this inclusion was recognition of AEPs as an allied health profession by Medicare Australia, the nation’s taxpayer-funded universal healthcare system. While similar professions exist in other countries (e.g., American College of Sports Medicine’s Registered Clinical Exercise Physiologist), the recognition of AEPs as an allied health profession by the federal government is unique. Comparable professions are shown in Table 1.

Patients of allied health professionals with Medicare provider status, such as an AEP, can be reimbursed by Medicare for some treatment costs when referred by their primary care physician. Although other allied health professions, including accredited practicing dietitians, podiatrists, and physiotherapists have held provider status for decades, AEPs were only granted this status in 2006. The burgeoning prevalence of overweight, obesity, diabetes, and associated chronic disease and illness sequelae justify the need for AEPs to join other established allied health professionals in a multidisciplinary approach to managing chronic, and largely preventable, noncommunicable disease. The primary aim of this document is to describe the training, roles, and scope of AEP practice in Australia. We will also provide some AEP healthcare usage data from the first decade of practice within the public health system.

TRAINING

Accredited Exercise Physiologists are 4-year university qualified allied health professionals specializing in clinical exercise interventions for persons at high risk of developing, or with existing, chronic and complex medical conditions and injuries. Accreditation for the profession is overseen by

¹School of Science and Technology, University of New England, Armidale, Australia

²University of Tasmania, Launceston, Tasmania, Australia

³Exercise and Sports Science Australia, Queensland, Australia

Address for correspondence: Neil Smart, PhD, University of New England, Department of Exercise Physiology, Armidale, NSW 2351, Australia; 61 2 6773 4076; e-mail: nsmart2@une.edu.au.

Conflicts of Interest and Source of Funding: None.

Copyright © 2016 by the Clinical Exercise Physiology Association

TABLE 1. Benchmarking of comparable professional associations representing clinical exercise physiologists.

Accreditation Title	Accredited Exercise Physiologist (AEP) ^a	Registered Clinical Exercise Physiologist (ACSM-RCEP)	Certified Exercise Physiologist (CSEP-CEP)
Accrediting organization	Exercise and Sports Science Australia (ESSA)	American College of Sports Medicine (ACSM)	Canadian Society for Exercise Physiology (CSEP)
Country	Australia	United States of America	Canada
Degree	NUCAP-accredited exercise physiology program; 4-y equivalent degree within last 2 y	Minimum master's degree in exercise science or related field	Minimum 4-y university degree in exercise science or related field
Exam	No	Yes (written only)	Yes (written and practical)
Total practical experience	500 h	600 h	200 h
Healthy populations	140 h (compulsory)	Not specified	Not specified
Cardiopulmonary	140 h (compulsory)	200 h (recommended)	50 h (compulsory)
Metabolic		120 h (recommended)	50 h (compulsory)
Musculoskeletal	140 h (compulsory)	100 h (recommended)	50 h (compulsory)
Neuromuscular		40 h (recommended)	25 h (compulsory)
Aging	Not specified	Not specified	25 h (compulsory)
Immunological/Hematological	Not specified	40 h (recommended)	Not specified
Other	Compulsory 80 h across any other domain	CPR for the professional rescuer or basic life support certification	CPR level C certification and course in emergency first aid
Webpage URL	https://www.essa.org.au/	http://certification.acsm.org/acsm-registered-clinical-exercise-physiologist http://certification.acsm.org/rcep-clin-hours	http://www.csep.ca/english/view.asp?x=748

CPR = Cardiopulmonary resuscitation; NUCAP = National Universities Curriculum Accreditation Program

^aNew criteria effective January 1, 2016

Exercise and Sports Science Australia (ESSA), the primary professional association representing AEPs, sports scientists, and exercise scientists in Australia. As of August 2015, there were over 3,533 AEPs registered with ESSA (2). Once ESSA accredited, an AEP is eligible and is usually granted Medicare provider status.

The main pathway to accreditation as an AEP in Australia is via the National University Course Accreditation Program. The National University Course Accreditation Program is administered by ESSA. There is also a much smaller individual accreditation scheme for suitably qualified applicants from other countries whereby international applicants undergo assessment of their credentials as clinical exercise physiologists via a desk audit before undergoing theory and practical examinations.

The National University Course Accreditation Program provides university academic units with a framework to build courses of excellence in exercise and sports science, aligning graduate outcomes with industry requirements. This also includes minimum clinical placement experience under the supervision of an AEP or other allied health profession who has experience and expertise in the design and delivery of exercise interventions for people with chronic disease. There is also the scope for health professionals who

do not have expertise in clinical exercise physiology to provide limited supervision in some generic allied health areas, such as adherence to healthy lifestyle interventions and/or behavior change.

Exercise and Sports Science Australia has a strong and comprehensive self-regulation system to ensure members uphold best practice professional standards and behavior. Members of the association are required to abide by professional standards, including the ESSA Code of Professional Conduct and Ethical Practice.

SCOPE OF ACCREDITED EXERCISE PHYSIOLOGISTS' PRACTICE*

Accredited Exercise Physiologist interventions are provided by individualized assessment and evidence-based exercise delivery and prescription, including health and physical activity education, advice, and support. Accredited Exercise Physiologists provide lifestyle modification using behavioral change strategies with the aim of optimizing function, health and wellness, and empowering the client to self-manage their condition through regular and appropriate

*The scope of accredited exercise physiology practice is currently under review.

exercise. As part of a multidisciplinary team, AEPs work with clients with a range of medical conditions for which there is an evidence base for the use of exercise as a treatment modality.

The scope of practice that ESSA accepts as reasonable for AEPs to be involved in (3) includes, but is not limited to:

- Screening and risk stratifying to ensure the safety and appropriateness of exercise and physical activity interventions. Accredited Exercise Physiologists are expected to assess their clients for some common health risks (e.g., cardiac events in those with diabetes or preeclampsia in pregnant women);
- Assessing a person's "movement" capacity in people of all ages and levels of health, wellbeing, or fitness;
- Development of safe and effective individualized exercise interventions;
- Provision of health education, advice, and support to enhance health and wellbeing;
- Provision of exercise intervention and advice for those at risk of developing a chronic condition or injury;
- Provision of an exercise prescription for those with existing chronic and complex medical conditions;
- Provision of rehabilitation and advice for patients following the acute stage of injury, surgical intervention, or during recovery to restore functional capacity and wellbeing. A primary area where the roles of an AEP and physical therapist differ is that it would not be acceptable for the AEP to diagnose injuries;
- The above tasks may occur at any level of primary, secondary, or tertiary healthcare and may include employment or volunteer work at an individual, community, or population health level through various employers or industries.

While not listed specifically in the scope of practice document, AEPs are required to maintain skills and competency through yearly continuing professional development overseen by ESSA. While extending one's knowledge and skills through additional study or certification via adjunct therapies may occur, the training and provision of these services is external to the AEP scope of practice and regulation by ESSA (3).

It is generally considered that an AEP will not provide invasive services, perform joint manipulation, massage or ultrasound therapies, or prescribe pharmaceutical medicines. While an AEP may use certain assessment tools and clinical tests that other health professionals use for diagnostic purposes (e.g., electrocardiography), it is not envisaged that an AEP will use these tools/tests for diagnostic purposes, but rather to inform clinical reasoning when designing and monitoring exercise interventions (3).

WHAT WORK DO ACCREDITED EXERCISE PHYSIOLOGISTS PERFORM AS PART OF THE MEDICARE BENEFITS SCHEME?

Medicare rebates are available for allied health services, including services provided by AEPs, for patients with

chronic conditions and complex care needs on referral from their regular primary care physician. This process requires primary care physician development of a *team care* arrangement. A team care arrangement is a comprehensive management plan including optimizing medication, specialist referral, and diagnostics. The team care arrangement also includes patient referral to at least two allied health professionals for up to a total of five allied health visits over a calendar year. For example, a person with T2DM may be referred one visit to a podiatrist to manage foot ulcers and then two visits each to an accredited practicing dietician and an AEP to assist with weight management via diet and exercise, respectively. Accredited Exercise Physiologists may set their own fees; however, under Medicare item 10953 (Exercise Physiologists), the suggested Medicare schedule fee is ~\$65 AUD (\$49 USD), with patients able to access a rebate of 85% or ~\$55 AUD (\$41 USD) (4).

To claim using the Medicare item number, there are a series of requirements that must be met by AEPs who provide these services. These include delivering services to the person (who cannot be a hospital inpatient) individually and in person, that the service is at least 20 min duration, and that written reports are provided to the referring medical practitioner for the first and last consults and as clinically indicated.

Group Services

In addition to individual treatment sessions, Medicare rebates are available for people with T2DM, involving group services provided by credentialed diabetes educators, AEPs, and accredited practicing dietitians on referral from a primary care physician. Patients are able to access an initial assessment (Medicare benefits scheme [MBS] item 81110, ~\$70 AUD [\$52 USD] per person) to determine their suitability to participate in up to eight group intervention services per year (MBS item 81115, ~\$17 AUD [\$13 USD] per person per session). These services may be delivered by AEPs as part of a multidisciplinary team or as a sole provider and delivered in groups of 2 to 12 people. Medicare encourages different professions to deliver their skills simultaneously (e.g., exercise and diabetes education) to optimize the program (5).

Indigenous Australians

Allied health services are also available to people of aboriginal and Torres Strait Islander (ATSI) descent who have had a health assessment on referral from their general practitioner (MBS item 81315). Item numbers specific to ATSI people exist because the prevalence of chronic disease and premature mortality is much higher than in non-ATSI Australians.

WHAT OTHER TYPES OF WORK DO ACCREDITED EXERCISE PHYSIOLOGISTS PERFORM?

The opportunities to provide compensable services through the national healthcare scheme, Medicare Australia, are limited to no more than five services per year per patient. Accredited Exercise Physiologists provide on average less

than three Medicare rebated consultations per week (1). This has the effect of limiting the income earned by AEPs through Medicare Australia, unless practitioners have a very wide referral base. The other challenge with this annual limit of consultations per patient is that most people require more than five sessions to positively and permanently affect behavior change and improve lifestyle to prevent progression or promote regression of chronic disease. Accredited exercise physiologists are well aware of these challenges and deficiencies and typically offer additional services on a fee-for-service basis.

Accredited exercise physiologists are also eligible to provide compensable services under schemes such as the Department of Veterans' Affairs (DVA), designed for retired armed service personnel. In addition, individuals injured at work or in traffic accidents, some public servants, and individuals with private health insurance are also eligible for AEP services. Insurance schemes, such as Australia's state *Work Cover* bodies, are recognized by most private health insurers. Accredited exercise physiologists commonly deliver services within private clinics, the hospital setting (inpatient and outpatient services), occupational rehabilitation companies, employment agencies, gymnasiums, general practitioner clinics, and research institutes.

DEPARTMENT OF VETERANS' AFFAIRS

Accredited exercise physiologists with Medicare provider status and approval by the DVA can also deliver services to DVA cardholding veterans (initial consult ~\$70 AUD [\$52 USD] and subsequent consult \$65 AUD [\$49 USD], group sessions ~\$30 AUD [\$22 USD]) (6). The role of an AEP within this scheme predominantly includes patient assessment; prescribing an exercise program; monitoring patient progress; and reviewing, progressing, and/or regressing the program as clinically necessary. As with other AEP-provided services, a major focus is to empower the client toward independence and self-management of their condition through regular and appropriate exercise.

PRIVATE HEALTH INSURERS

Most of the mainstream private healthcare insurers also require allied health professionals to obtain Medicare provider status so their clients can claim partial reimbursement for their service fees. For a service for which a private health insurance benefit is payable, the patient who incurred the medical expenses cannot also claim the Medicare benefit for the same service.

WORKERS' COMPENSATION SCHEMES

Many large employers also have workers' compensation schemes, the largest being state-based *Work Cover* schemes, to mitigate costs associated with work-related injury or illness. Some state *Work Cover* bodies periodically require AEPs and other allied health practitioners to undertake training updates, which is separate from ESSA's requirements for continuing education. Both training updates and continuing education fees are incurred by the AEP.

Standard fees for workers' compensation schemes vary nationally, but are generally higher than Medicare or DVA. For example, NSW *Work Cover* stipulates fees for AEP services as ~\$150 AUD (\$112 USD) for initial consultations, ~\$150 AUD per hour (maximum 1 h) for report writing (initial report required with proposed management plan), and ~\$62 AUD (\$47 USD) per supervised exercise session. Initial management plans are typically up to eight exercise sessions. Accredited exercise physiologists are ideally qualified to be offering services in the area of occupational (worker) health and rehabilitation.

OTHER ACTIVITIES

Individual AEPs may acquire different skills during their training and working careers, and those with entrepreneurial aspirations may consult in a wide range of industries and for a wide range of clients and treatments. Stipulated training requirements vary between employers. The Australian mining and other labor intensive industries have an ongoing need for AEPs and other allied health professionals for workplace and employee health assessments to reduce work injuries and managing return-to-work plans for employees injured at work. However, these types of activities are typically billed privately as a consultant or casual work agreement, and fees are negotiated on a case-by-case basis and therefore vary greatly.

DATA

As the AEP profession is relatively new, servicing data is limited, but recent analyses from the first 7 years of MBS provider status (2006–2012) suggests >120,000 Medicare AEP consultations are conducted annually, 62% of which were for women and most commonly those aged 55–64 years (7). Even though AEP consultation numbers are rising, these consultations are a largely underutilized resource in the Australian setting. Almost 50% of Australians have some form of chronic disease (6), and as many as 13 million Australians are at risk of chronic disease (7), largely attributed to ~63% of the population being overweight or obese (8). However, it has been estimated that less than 1% of people at risk of chronic disease due to being overweight and obesity are referred to an AEP (7). Similarly, in 2012, the Australian Health Survey showed that over 747,000 Australians had known T2DM (8), and these individuals are entitled to one Medicare-funded assessment service per year. However, only 5,536 such services were conducted in 2012, indicating that less than 0.8% of eligible patients were referred for and received this service (9). In terms of group exercise for these patients, approximately 28,000 AEP sessions are offered per annum which services only about 3.9% of the prevalent population. Services for ATSI people are even more underrepresented with only about 450 AEP services delivered per annum, which targets only 0.08% of the ATSI population. Anecdotal evidence suggests the reason why these numbers are so small relative to the disease burden is many physicians consider the referral process to be cumbersome or are not well aware of the services AEPs provide.

LIMITATIONS

Exercise and Sports Science Australia applauded the introduction of MBS chronic disease management items and the intended goals of fostering interdisciplinary care. However, ESSA is currently supporting the review of MBS item processes that do not meet best practice service delivery due to limited access to allied health professionals, costly inefficiencies, and significant administrative burden. In particular, ESSA supports the provision of additional rebateable services for patients living with chronic disease in order to effectively achieve behavioral change and self-management (7).

The Australian government is aware that Australia's health system is under increasing pressure to provide better quality, affordable, and accessible healthcare based on universal access to Medicare (10). A long-term strategy is needed to offer a better patient journey for those with complex and chronic health conditions, to investigate innovative care and funding models, better recognition and treatment of mental health conditions, and reduce the rate of progression from primary care to more expensive acute hospital care pathways (10).

Consequently, in 2015, the federal government announced a major review of Medicare, with every subsidized test, treatment, and procedure to be investigated to assess effectiveness and value for money. This will include review of the existing chronic disease management items outlined above to examine opportunities for the reform of primary healthcare in improving the management of people with complex and chronic disease (10). This may significantly change the administration of MBS items delivered by allied health practitioners, including AEPs, into the future.

Evidence is gradually emerging in the literature supporting the cost effectiveness of AEP services in Australia.

REFERENCES

1. Department of Human Services. Chronic disease management plan [Internet]. Canberra, Australia: Department of Human Services; [updated 2016 Feb 5; cited 2016 Jun 8]. Available from: <http://www.humanservices.gov.au/customer/services/medicare/chronic-disease-management-plan>
2. Exercise and Sports Science Australia [Internet]. Albion DC: ESSA; [cited 2015 Aug 21]. Available from: <https://www.essa.org.au/>
3. Exercise and Sports Science Australia. Scope of practice—exercise physiologist [Internet]. Albion DC: ESSA; [cited 2015 Nov 3]. Available from: <https://www.essa.org.au/essa-me/how-can-an-accredited-exercise-physiologist-help/scope-of-practice-exercise-physiologist/>
4. Department of Health. Medicare benefits schedule—item 10953 [Internet]. Canberra, Australia: MBS Online; [cited 2015 Aug 21]. Available from: <http://www9.health.gov.au/mbs/search.cfm?q=10953&Submit=&sopt=1>
5. Exercise and Sports Science Australia. Medicare Australia [Internet]. Albion DC: ESSA; [cited 2015 Aug 24]. Available from: <https://www.essa.org.au/professional-services/medicare/>
6. Australian Institute of Health and Welfare. 1 in 5 Australians affected by multiple chronic diseases [Internet]. Canberra: AIHW; 2015 Aug 12. Available from: <http://www.aihw.gov.au/media-release-detail/?id=60129552034>
7. Cheema BS, Robergs RA, Askew CD. Exercise physiologists emerge as allied healthcare professionals in the era of non-communicable disease pandemics: a report from Australia, 2006–2012. *Sports Med.* 2014;44(7):869–77.
8. Australian Bureau of Statistics. Australian Health Survey: first results, 2011–2012. Canberra, Australia: Australian Government; 2012.
9. Department of Human Services. Medicare item reports [Internet]. Canberra, Australia: The Department; [updated 2016 May 25; cited 2015 Oct]. Available from: http://medicarestatistics.humanservices.gov.au/statistics/mbs_item.jsp
10. The Department of Health. Primary health care advisory group [Internet]. Canberra, Australia: The Department; [updated 2016 Mar 31; cited 2015 Aug 28]. Available from: <http://www.health.gov.au/internet/main/publishing.nsf/content/primaryHealthCareAdvisoryGroup-1>
11. Deloitte Access Economics. Value of accredited exercise physiologists in Australia. Canberra, Australia: Deloitte Access Economics; 2015.

Exercise and Sports Science Australia commissioned Deloitte Access Economics (an economics advisory practice) to identify the benefits of employing AEPs in chronic disease management and, in particular, identify economic benefits relating to health system costs, productivity costs, and years of life saved attributed to interventions by AEPs. Deloitte Access Economics identified that exercise interventions delivered by AEPs are estimated to be efficacious and highly cost effective in the Australian healthcare setting (11). Accredited exercise physiologist interventions provide a high return on investment in treating people with chronic conditions, notably prediabetes and T2DM, mental illness (including physical comorbidities), and cardiovascular disease (11). For people with T2DM receiving an exercise intervention, as delivered by an AEP, the expected annual saving in health system expenditure is \$5,107 AUD (\$3,834 USD) per person annually (11).

Additionally, ESSA is currently supporting a multi-center trial into both clinical and cost effectiveness, focusing on T2DM. This data, along with a larger initiative of a national effectiveness database, are needed to underpin the standing of the profession among patients, referring medical practitioners, and funding/regulatory bodies.

SUMMARY

The recognition of the AEP profession in Australia is relatively new and still emerging. The current Medicare model is encouraging, but a maximum five AEP services is often insufficient to achieve desired treatment goals. Given the expanding scope of practice of AEPs, it is likely that, in the future, AEP subspecialty careers will be clarified, and associated training courses will be formalized. Embedding the AEP model in the healthcare system is unique and provides a blueprint for other countries to replicate.