



ESSA:
EXERCISE & SPORTS SCIENCE AUSTRALIA

**ACCREDITED EXERCISE
PHYSIOLOGIST PROFESSIONAL
STANDARDS 2021**

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Contents

| | |
|--|-----------|
| Preface | 3 |
| Important Terminology and Concepts | 5 |
| Professional Attributes | 7 |
| 1. Professional Practice | 8 |
| 2. Foundational Knowledge | 9 |
| 3. Assessment and Client Management | 10 |
| 4. Design and Delivery of Exercise-Based Interventions | 11 |
| Glossary | 12 |
| References | 14 |



Preface

The Exercise & Sports Science Australia (ESSA) Accredited Exercise Physiologist (AEP) Professional Standards for Accreditation set the minimum standards for entry to and ongoing professional practice as an ESSA Accredited Exercise Physiologist (AEP).

This Professional Standards for Accreditation document is a revision of the AEP Professional Standards and has been developed in consultation with the ESSA membership, regulators, and academic and industry professionals.

The AEP Professional Standards for Accreditation cover the core elements of effective and ethical clinical exercise physiology practice. The AEP Professional Standards for Accreditation recognise the diverse contexts in which AEPs practise and includes but is not limited to clinical and non-clinical settings such as policy, management, research, teaching, and education. The AEP Professional Standards for Accreditation are designed to be high level concepts which focus on providing a strong base of transferable knowledge, skills, and reflective practice to support lifelong learning and adaptability to different and evolving practice contexts and evidence base.

This document builds on the underpinning Accredited Exercise Scientist Professional Standards for Accreditation, which professionals must also meet. The Accredited Exercise Scientist Professional Standards for Accreditation address core underpinning aspects of practice applying the science of exercise to developing interventions that improve health and fitness, well-being, and performance.

These standards provide expectations for what the public can expect as assurance of safe practice. They form part of ESSA's self-regulatory framework in combination with other standards, policies, and guidelines set by ESSA that AEPs must abide by.

The document is structured into overarching Professional Attributes which describe the knowledge, skills, attitudes, values, and abilities expected of an AEP.

Four standards in total together describe the minimum standards for practice: Professional Practice, Foundational Knowledge, Assessment and Client Management, and Design and Delivery of Exercise-Based Interventions, which are all of equal importance. Each standard starts with a guiding principle, which summarises the expectations for what an individual needs to demonstrate. These are further detailed in the underlying elements which describe practice behaviour expectations through measurable statements that support meeting the guiding principle. These professional standards focus on the application and transfer of knowledge and skills. It is also expected that the knowledge and skills defined throughout the elements of each standard will be integrated and applied across AEP practice. Key aspects of AEP practice such as effective communication, inclusivity, and person-centred care are embedded within the standards.

These standards are preceded by an Important Concepts section describing further detail about AEP practice to support understanding of the elements and guiding principles in each standard. Key terms are defined in the Glossary at the end of the document.

The standards utilise Bloom's taxonomy as a framework to support implementation and may be used by course education providers to develop a curriculum framework for education in clinical exercise physiology. It is expected that the 2021 revision of the AEP Professional Standards for Accreditation is read in conjunction with the AEP Professional Standards for Accreditation Support Guide for course providers. The Support Guide details the intent and content of the Professional Standards, including examples of knowledge and skill components for the Guiding Principle under each Professional Standard.

ESSA and the ESSA Standards Council would like to sincerely thank the members of the ESSA AEP Professional Standards Review Committee, who have made a direct and valuable contribution to the revision of the ESSA AEP Professional Standards for Accreditation.

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Important Terminology and Concepts

Accredited Exercise Physiologists are university-qualified allied health professionals equipped with the knowledge, skills, and abilities to prescribe, deliver, adapt, and evaluate safe and effective movement, physical activity, and exercise-based interventions to facilitate and optimise health status, function, recovery, independence, and participation in activities across the lifespan, including at home, school, work, and in the community.

AEPs apply these interventions to individuals and populations across the full health spectrum, which includes but is not limited to people with or at risk of developing a health condition (such as disease, injuries, disorders, and traumas), people with a disability, and people with age-related illness and conditions. AEP practice is centred around using clinical judgement, and clinical exercise prescription to improve health outcomes.

AEP practice is underpinned by evidence-based practice. AEPs source and critically analyse peer-reviewed research and assess its validity and relevance to all aspects of their practice.

AEPs screen and assess capacity and function for participation in activities throughout all stages of life, including activities of daily living and work-related activities. They also provide education, advice, and support to improve health outcomes through a strong focus on behavioural change, self-management, reduced fear of movement, and increased self-efficacy in exercise to enhance function, capacity, performance, and quality of life.

Areas of Practice

Accredited Exercise Physiologists apply their skills broadly across the primary, secondary, and tertiary health care (including but not limited to personal injury, workplace rehabilitation, and chronic disease management), aged care, and disability sectors. The context of AEP practice includes the direct provision of clinical services, however, is not limited to the clinical setting. It includes roles in management, administration, education, research, advisory, regulatory, or policy development roles; and any other roles that impact on safe, effective delivery of AEP services.

AEPs apply a person-centred approach to treatment of individuals across the lifespan from children through to older adults, and people of diverse backgrounds and populations.

The AEP Professional Standards support the development of transferrable knowledge and skills for prescribing exercise to people across the full health spectrum to improve, maintain, or prevent decline of health related status and function, with a focus on clinical treatment for people with complex, chronic conditions and co-morbidities.

AEPs deliver services in varying delivery modes, such as in person individually or in groups, or via telepractice.

Accredited Exercise Scientist Professional Standards

Accredited Exercise Physiologists are also Accredited Exercise Scientists and have met the Accredited Exercise Scientist (AES) Professional Standards for Accreditation [1]. The AEP Professional Standards for Accreditation therefore build and expand on the AES Professional Standards, and the two sets of standards should be read together when considering the full range of knowledge, skills, attitudes, values, and abilities of an AEP.

An AES is university-qualified exercise professionals who apply the science of exercise when developing interventions that improve health and fitness, well-being, and performance, and that assist in preventing acute injury and chronic conditions. An AES educates, promotes, implements, and manages the adoption and adherence to physical activity and/or exercise-related health behaviours. They can also apply their skillsets as allied health assistants.

Foundational skillsets include selecting appropriate research methods and applying behavioural change principles. Strong knowledge of anatomy, biomechanics, physiology, growth and development, and motor control and learning are well-developed before completing clinical exercise physiology training.

Inclusive Practice

Accredited Exercise Physiologists recognise diversity within Australian communities including Aboriginal and Torres Strait Islander peoples; people of all genders, relationships, identities, and sexualities; culturally and linguistically diverse backgrounds; those with a disability; and groups experiencing inequity.

AEPs develop and deliver safe and inclusive services that consider diversity, and the beliefs, values, and attitudes of their clients. AEPs also reflect on their own beliefs, values, and attitudes and how this influences their practice.

Approach to Care

Accredited Exercise Physiologists practice according to evidence-based models of care, which consider the whole person and factors that influence their health and well-being, and ability to function and participate at home, school, work, and in the community. AEPs screen and assess for these factors to identify client needs, preferences, barriers, and facilitators to inform recommendations and interventions.

This includes but is not limited to:

- » Biopsychosocial factors
- » Value-based care principles
- » Person-centred care
- » Social and cultural determinants of health



Professional Attributes

An Accredited Exercise Physiologist can:

1. Integrate knowledge and skills of AEP practice to design and deliver a broad range of health care services and adapt these into emerging areas.
2. Use critical thinking to analyse and solve problems across the scope of AEP practice and adapt to change.
3. Assess risks, capacity, and function and stratifies and applies appropriate risk management strategies.
4. Prescribe, implement, and evaluate safe and effective movement, physical activity, and exercise-based interventions for clients across the full health spectrum to optimise function, facilitate recovery, and maximise independence and participation in activities at home, school, work, and in the community.
5. Apply behavioural change principles to support treatment and management to prevent and minimise impairments, limitations, and activity restrictions associated with health conditions.
6. Communicate effectively and respectfully with clients and supports person-centred care through shared decision-making, and maintains accurate, timely, and appropriate documentation and records of services.
7. Practice ethically, collaboratively, and innovatively within the scope of AEP training.
8. Collaborate effectively and respectfully with relevant others involved in the client's health and well-being including delegating tasks, referring, and working in partnership with other professionals and services where appropriate.
9. Display professional conduct, decision-making, and person-centred care that is consistent with the ESSA Code of Professional Conduct and Ethical Practice [2] and other codes of conduct, legislation, and standards that apply to their practice.
10. Apply evidence-based practice to compile and critically evaluate scientific rationale for professional decision-making, service delivery, and evaluation of interventions and their outcomes.
11. Commit to professional self-development in the field of AEP practice through educational engagement and ongoing learning, self-reflective practice, interprofessional collaboration, and innovative practice.
12. Practice in a safe, respectful, and inclusive way that is responsive to people of diverse backgrounds and populations, including Aboriginal and Torres Strait Islander peoples; people with diverse genders, relationships, identities, and sexualities; culturally and linguistically diverse backgrounds; those with a disability; and other groups experiencing inequity.
13. Apply appropriate digital practices including critically analysing choice of technology across service delivery such as telepractice/telehealth.
14. Exhibit professional leadership in all aspects of practice including advocating for access to health care services and AEP services and contributing to education and professional practice development of peers and students.

1. Professional Practice

1.1. Guiding principle

An AEP is able to apply their AEP knowledge and skills to practice effectively in a professional, ethical, inclusive, and collaborative manner across the broad health care system, including in clinical and non-clinical settings.

1.2. Elements of Professional Practice

An AEP has demonstrated an ability to:

- 1.2.1 Practise with integrity within the scope of practice for an AEP, the ESSA Code of Professional Conduct and Ethical Practice, and jurisdictional Codes of Conduct.
- 1.2.2 Practise in accordance with ethically relevant legislation, regulations, and standards that apply to AEPs including privacy, confidentiality, data security, informed consent, and record-keeping.
- 1.2.3 Differentiate and select verbal and non-verbal communication strategies that are contextually appropriate, timely, accessible, and respectful to clients, population groups, and relevant others.
- 1.2.4 Develop effective, concise, respectful, and informative clinical documentation, including case notes and reports, and apply appropriate record keeping practices.
- 1.2.5 Practise in a culturally safe, inclusive, sensitive, respectful, and responsive way and according to person-centred care principles.
- 1.2.6 Practise collaboratively and effectively with other professionals, including seeking feedback and input to inform decision-making, delegating tasks, and referring to other professionals and services where appropriate.
- 1.2.7 Develop reflective practices through self-reflection, seeking and engaging with feedback from colleagues and clients, critically evaluating service delivery and outcomes, and engaging in ongoing learning.
- 1.2.8 Demonstrate leadership and the ability to advocate for client access to AEP services and appropriate health care.

2. Foundational Knowledge

2.1. Guiding principle

An AEP is able to critically evaluate the evidence base and apply relevant knowledge to AEP practice in an effective and methodical manner to optimise health status, function, recovery, independence, and participation for individuals and population groups across the full health spectrum.

2.2. Elements of Foundational Knowledge

An AEP has demonstrated the ability to:

- 2.2.1 Integrate knowledge of anatomy, physiology, pathophysiology, and other determinants of health and function and apply these to inform safe and effective movement, physical activity, and exercise-based interventions for individuals and population groups throughout all stages of their life.
- 2.2.2 Examine principles of biopsychosocial care, value-based care, person-centred care and social and cultural determinants of health and apply this to promote health and well-being for individual clients and population groups.
- 2.2.3 Evaluate physiological responses and adaptations to acute and chronic exercise for clients across the full health spectrum.
- 2.2.4 Evaluate the effect of commonly prescribed medications, diagnostic procedures, medical, surgical, and other interventions on both resting and exercise-related physiological responses across the full health spectrum.
- 2.2.5 Evaluate research findings and apply exercise prescription principles to develop recommendations and interventions, including targeted exercise prescription for the purposes of optimising health status, function, recovery, independence, and participation.
- 2.2.6 Apply clinical, ethical, and evidence-based decision-making to formulate appropriate interventions and recommendations and communicate the expected outcomes.
- 2.2.7 Explain national, state, and compensable scheme frameworks across the health care, aged care, and disability sectors, and the requirements for AEPs working in these settings.
- 2.2.8 Evaluate and apply contextual learning principles and behaviour change strategies to improve health outcomes, increase engagement, motivation, and adherence, and empower self-management of health conditions.

3. Assessment and Client Management

3.1. Guiding principle

An AEP is able to safely screen, assess, and evaluate function, capacity, and health status for individuals and population groups across the full health spectrum and use this information to inform safe and effective movement, physical activity, and exercise-based interventions that consider health and treatment needs, and client preferences and goals.

3.2. Elements of Assessment and Client Management

An AEP has demonstrated the ability to:

- 3.2.1 Formulate appropriate screening processes to evaluate and stratify risk for participation in assessments and interventions, including consideration of appropriate service modalities for clients.
- 3.2.2 Formulate safe, effective, and culturally sensitive assessments to collect relevant information, social and cultural determinants of health, client history, and client needs, preferences, barriers, facilitators, and goals.
- 3.2.3. Formulate appropriate assessments and outcome measures relevant to treatment and client goals, and evaluate health status, function, capacity, and progress, to inform clinical reasoning and to monitor the delivery and outcomes of interventions.
- 3.2.4. Distinguish, record, report, and appropriately action changing risk factors and adverse signs and symptoms that may arise before, during, and after assessments and interventions.
- 3.2.5 Evaluate and record assessment outcomes in a timely and accurate manner to inform practice and communicate outcomes and relevance to goals effectively to clients and relevant others.
- 3.2.6 Communicate appropriate client support strategies to facilitate in-person and telepractice/telehealth service delivery which considers client needs, preferences, health and digital literacy, and accessibility factors.
- 3.2.7 Distinguish when client needs are outside of scope or competence and take appropriate, timely actions including engaging effectively with other professionals.
- 3.2.8 Choose and use relevant technology and equipment efficiently, effectively, and safely.

4. Design and Delivery of Exercise-Based Interventions

4.1. Guiding principle

An AEP is able to practise person-centred care and partner with individuals and population groups across the full health spectrum to prescribe, deliver, adapt, and evaluate safe and effective evidence-based movement, physical activity, and exercise-based interventions that optimises health status, function, recovery, independence, and participation in activities at home, school, work and in the community.

4.2. Elements of Exercise Prescription and Delivery

An AEP has demonstrated an ability to:

- 4.2.1 Formulate evidence-based exercise prescription, interventions, and recommendations that address health and treatment related client needs, preferences, goals, and abilities, assessment findings, and social and cultural determinants of health.
- 4.2.2 Design, prescribe, deliver, and monitor safe and effective movement, physical activity, and exercise-based interventions for clients with complex presentations, including those with acute and chronic health conditions and multiple comorbidities.
- 4.2.3 Formulate and apply strategies to manage risks, evaluate progress, and adapt recommendations and interventions in partnership with clients based on needs and measured outcomes.
- 4.2.4 Create and apply inclusive, respectful, and effective communication strategies to educate and engage clients in informed decision-making about purpose, benefits, risks, options, and costs for proposed interventions, expected outcomes, and strategies for future prevention.
- 4.2.5 Apply and evaluate exercise prescription, health behaviour, and lifestyle change strategies and education, in partnership with clients to increase engagement, motivation and adherence, and improve health and well-being.
- 4.2.6 Formulate strategies during treatment to empower clients to undertake safe and effective self-management during and following discharge from interventions.
- 4.2.7 Communicate effectively and respectfully with clients and relevant others about progress and outcomes of interventions, including appropriate reporting.
- 4.2.8 Evaluate effectiveness of interventions and their outcomes including the selection, interpretation, and reporting of outcome measures to inform future practice.

Glossary

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| Biopsychosocial | Practice informed by biological, psychological, and social factors and their complex interactions in understanding health, illness, and health care delivery. |
| Chronic conditions | Health conditions that are persistent and long lasting. They include the commonly reported cardiovascular diseases, cancers, chronic respiratory conditions, chronic musculoskeletal conditions, metabolic diseases, and mental health conditions; some infectious diseases; congenital disorders and other conditions; and disorders or disability stemming from injury [3]. |
| Client | A person, group, or organisation that uses the services of an AEP. |
| Client history | The relevant background information of a client's life that will be helpful in determining what course(s) of action need to be taken in providing services for the client including medical history, physical activity, and other health services. |
| Disability | Umbrella term describing health related functioning impairments, activity limitations, and participation restrictions. |
| Diversity and diverse backgrounds | Differences among groups of people and individuals that can encompass ethnicity, race, gender, socioeconomic status, culture, exceptionalities, language, religion, sexuality, and geographical area. |
| Equipment | Tools used to deliver services including those used in assessments, exercise equipment, and technology such as software for telepractice, exercise programming, and record keeping. |
| Evidence-based | Applying the best available research outcomes (evidence) when making decisions about practice. AEP professionals who perform evidence-based practice use research evidence along with professional expertise and client preferences to provide best practice, person-centred care. |
| Exercise | A specific type of physical activity that is repetitive and planned with the objective of improving or maintaining physical activity. Exercise includes various exercise modalities such as endurance, anaerobic, flexibility, resistance, balance, and agility exercises, which can be performed over a range of intensities, frequencies, and durations within a variety of environments. |
| Full health spectrum | State of health from healthy through to those at risk of developing a health condition, and people with health conditions, a disability, and aged related illnesses and conditions, including chronic, complex conditions. |
| Function | Umbrella term for all health-related functioning including body functions and structures, activities, and participation. |
| Health condition | Diseases, disorders, traumas, and injuries. |
| Health status | Current state of a person's health at a point in time. |
| Individual | One person or a small group of people undertaking an activity as a collective. |

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| Informed consent | The process by which a professional provides full and transparent information on services including purpose, options, risks, benefits, rights, and responsibilities so that the client and/or their substitute decision-maker may make a voluntary decision to participate. Consent may be verbal, written, or a combination and is an ongoing process, and includes informing clients about their rights to withdraw or change their mind without penalty. |
| Jurisdictional Codes of Conduct | Includes the National Code of Conduct for Health Care Workers as it applies in each Australian state or territory, and any other relevant legislation and/or regulation. |
| Interprofessional practice | Health workers from different professional backgrounds working together with patients, families, carers, communities, and each other to deliver health care. |
| Interventions | A combination of elements and strategies designed to improve health status and produce behavior change. AEP interventions may include clinical treatment, exercise prescription, education, advice, and support to achieve a particular outcome. |
| Person-centred | The approach to communication and interaction with a client, and the planning, delivery, and evaluation of services that is grounded in mutually beneficial partnerships with clients and relevant others involved in the client's health and well-being. |
| Population groups | Groups of people that share various cultural, geographic, and demographic factors, including communities. |
| Practice | The individual uses their knowledge and skills as a practitioner in their profession. |
| Practise | Perform (an activity) or exercise (a skill) repeatedly or regularly in order to acquire, improve or maintain proficiency in it; carry out or perform (a particular activity, method, or custom) habitually or regularly. |
| Relevant others | People involved in a client's health and well-being, including but not limited to medical, health and exercise professionals; carers; support workers; and families. |
| Risk management | Risk management and risk assessment concepts – considerations of the risk of a client's capabilities; environmental considerations including slips, trips and falls, policies and procedures, and infection control/good hygiene. |
| Social and cultural determinants of health | The ecological, individual, social, cultural, and economic factors influencing health outcomes. |
| Standard | The sub-discipline area consisting of a guiding principle and elements of professional practice. |
| Telepractice | Delivery of technology-based exercise and sports science services supporting wellness, prevention, health management, and performance improvement. Settings include health, sport, and education. Telepractice involves the transmission of information using telecommunication technologies including but not restricted to video, telephone, and internet. Telepractice includes telehealth services [4]. |
| Value-based care | The health outcomes that matter to patients relative to the resources or costs required [5]. |

References

1. [AES Professional Standards for Accreditation](#)
2. [ESSA Code of Professional Conduct and Ethical Practice](#)
3. [Australian Institute of Health and Wellbeing: Exploring the definition of chronic conditions for collective monitoring in Australia 2021 Report](#)
4. [ESSA Telepractice Standards](#)
5. [Australian Centre for Value-Based Health Care](#)

Disclaimer: ESSA has chosen to use a broad, principle-based approach to define the minimum professional standards for accreditation as an Accredited Exercise Scientist. By adopting this approach, ESSA aims to harness individual competencies, embrace innovative practice and remain sensitive to changes within the industry environment. The information provided in this document is not intended to be professional advice and is no substitute for professional or medical advice relevant to the user's circumstances and purposes. Individuals must ensure they have the appropriate competencies for all activities undertaken. ESSA does not endorse, warrant or make any representations in relation to, and does not accept any liability in relation to, the goods and services of those third parties who utilise this document.