Deloitte.

Deloitte
Access Economics

Valuing the contribution of Exercise Physiologists in Australia:

An economic perspective

AUGUST 2026

CEO foreword

Australia's health system is facing significant challenges. Rising chronic disease rates and patient complexity, an ageing population, growing service demand coupled with workforce capacity constraints, and increasing fiscal pressures require solutions that not only improve health outcomes but also deliver measurable economic value.

This report provides compelling evidence that exercise physiology is one of those solutions.

For many years, Exercise Physiology has been recognised for its clinical expertise and evidence-based impact on population health outcomes. This report builds on that foundation by quantifying the economic value of exercise physiology and demonstrating its contribution to broader health, social and economic priorities.

The findings demonstrate that exercise physiology delivers strong returns on investment across a range of health conditions and care settings. Exercise Physiologists reduce healthcare costs, prevent avoidable hospital presentations and readmissions, improve productivity outcomes and contribute to long-term economic prosperity.

This report establishes a robust and defensible evidence base for the profession's economic contribution. It provides decision-makers, funders and policymakers with the information needed to make informed investment decisions and to better integrate exercise physiology within Australian health and social care systems.

Exercise & Sports Science Australia's ambition is that the findings contained in this report help shift the conversation beyond professional advocacy to economic necessity. The evidence is clear: exercise physiology delivers strong economic returns and is an essential component of an effective and sustainable healthcare system.

Katie Lyndon
CEO Exercise & Sports Science Australia (ESSA)

Contents

Acronyms

Acronym	Full name
ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
AR-DRG	Australian Refined Diagnosis Related Groups
BCR	Benefit-cost ratio
CBA	Cost-benefit analysis
COPD	Chronic obstructive pulmonary disease
DVA	Department of Veterans' Affairs
ED	Emergency Department
EP	Exercise Physiologist
EQ-5D	EuroQol 5-Dimension health-related quality of life measure
ESSA	Exercise & Sports Science Australia
GP	General practitioner
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification
IHACPA	Independent Health and Aged Care Pricing Authority
LOS	Length of stay
MBS	Medicare Benefits Schedule
NDIS	National Disability Insurance Scheme
PBS	Pharmaceutical Benefits Scheme
PTSD	Post traumatic stress disorder
QALY	Quality adjusted life year
RTW	Return to work
SDAC	Survey of Disability, Ageing and Carers
VSLY	Value of a Statistical Life Year

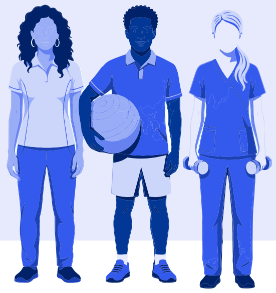
The value of Exercise Physiologists

$1.09b in net economic benefit is generated across six modelled condition groups over 3 years

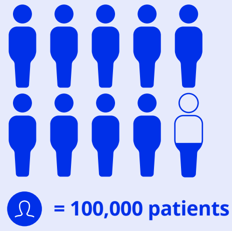
$2,004 average net benefit per treated patient

2.5 benefit-cost ratio (every $1 invested in EP services returns $2.50 in economic benefit)

Reach and opportunity



There are
9,870
Exercise Physiologists (EPs) in Australia



Across six in-scope conditions EPs in Australia support approximately
940,000
patients annually

The analysis evaluated six in-scope conditions, representing approximately 46% of EP activity. As a result, the quantified benefits presented in this analysis may be conservative.

Relieving system capacity

60,355 avoided hospital admissions

38,618 avoided ED presentations

413,009 avoided hospital bed-days

146,748 avoided ED hours

12,599 avoided surgical events

Wellbeing and Quality of Life

average estimated BCR of
2.5

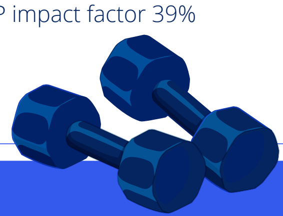
18,072
QALYs gained over three years

Condition group	Total net benefit ($m)	Benefit per patient	BCR
Cardiovascular	$152.7	$1,937	2.5
Pulmonary	$21.0	$1,815	2.4
Musculoskeletal	$543.2	$2,113	2.6
Mental health	$168.9	$1,970	2.5
Physical disability	$144.5	$1,647	2.3
Cancer	$59.4	$2,609	3.0
Total conditions	$1,089.8	$2,004	2.5

Source: Deloitte Access Economics (2026).

Methodology

- Six condition groups (with case studies) modelled over three-year time horizon
- Model compared EP intervention to a no-EP counterfactual
- Benefits include avoided health system costs and productivity gains, wellbeing gains reported separately
- Weighed EP impact factor 39%



Future opportunities

Integrate EPs into end-to-end care across primary, secondary and community health settings to support prevention, early intervention, rehabilitation, and long-term management.

Integrate EPs within aged care more broadly to support healthy aging, self-management, and community participation.

Expanding the role of EPs within occupational rehabilitation and return-to-work pathways to ensure benefits of early intervention are realised.

Invest in evidence translation regarding the clinical and financial efficacy of exercise physiology in the broader community, public health system, and compensable schemes.

Increase awareness of exercise physiology among policymakers, employers and broader community.

Executive summary

Background

Regular exercise is one of the most effective ways to reduce the risk of chronic diseases, improve health outcomes and enhance quality of life. In 2023, Australians lost an estimated 4.4 million years of healthy life due to chronic conditions, accounting for 85% of the total burden of disease.[1] More than one in three Australian adults aged 18 to 64 (37%) do not meet physical activity guidelines – equating to over 5.7 million people.[2]

Physical inactivity has significant health and economic consequences. Physical inactivity is a leading modifiable risk factor for chronic disease and can be attributed to $2.4 billion in health system costs in 2018.[3] Over the decade between 2014 to 2024, spending on disease and injury increased by $78.1 billion, with chronic conditions accounting for 60% of this expenditure growth.[4] Physical inactivity also plays a critical role in poor recovery following injury and in worsening mental health outcomes, highlighting its importance not only in disease prevention but also in rehabilitation and broader health management.

The burden of chronic disease creates both a health system challenge and an opportunity for targeted prevention. Physical inactivity accounts for 2.5% of Australia's total burden of disease, requiring $2.4 billion in health system spending in 2018-19, and is a primary contributor to the development and acuity of chronic health conditions.[5] Addressing physical inactivity requires more than access to exercise alone. For many people living with chronic conditions, injury, disability or complex health needs, achieving and sustaining meaningful improvements in physical activity requires clinically appropriate exercise prescription, behaviour-change support and ongoing progression. These are the core functions delivered by Exercise Physiologists (EPs).

Deloitte Access Economics was engaged by Exercise & Sports Science Australia (ESSA) to estimate the value of EPs in Australia and present an updated economic evidence base demonstrating what value investment in Exercise Physiology delivers to Australia's health system. While physical activity is the clinical mechanism underpinning many health outcomes, the value generated by exercise physiology arises through clinically prescribed and progressively adapted interventions that improve functional capacity, support sustained behaviour change and enable ongoing participation in everyday life. Beyond prescribed interventions, EPs help build individual independence and resilience, enabling individuals to better manage their health and wellbeing. An economic analysis was undertaken targeting six core condition groups (cardiovascular, pulmonary, musculoskeletal, mental health, cancer-related conditions, and physical disability) where EP-led exercise and lifestyle interventions can play a critical role in improving outcomes. It is important to note that EPs work with people across a broad range of chronic health conditions, injuries and functional impairments that are not limited to the conditions within the scope of this analysis.

What is the role and value of an EP?

The value of an EP lies in delivering structured, individually tailored and clinically informed interventions that extend beyond the non-clinical exercise support offered in general fitness settings. EP services integrate therapeutic exercise with health education, lifestyle modification, behaviour-change support and progression over time, customised to individual comorbidities, functional limitations, risk profile and motivation. These interventions are designed not simply to increase physical activity, but to improve functional capacity, support independence and enable sustained participation in everyday life, with exercise as the clinical mechanism for broader health, occupational and social outcomes.

The benefits attributed to EPs in this analysis not only stem from increasing physical activity, but also from the sustained behaviour change achieved through EP interventions.

Approach to this report

The purpose of this analysis is to estimate the economic value that EPs currently deliver to their patients. The analysis leverages an economic model which considers the outcomes for an individual under two contrasting scenarios; one where the individual works with an EP and a second where they receive no EP intervention. Where possible, the analysis leverages cost-benefit analysis (CBA) methodologies with an additional investigation of wellbeing impacts to estimate the avoided costs and improved wellbeing attributed to the services delivered by EPs. The framework and methodology was co designed with a Project Advisory Group comprising members of ESSA and EPs.

The core model operates under two scenarios:

Counterfactual scenario represents individuals who do not receive an intervention from an EP. It should be noted that individuals may seek alternative forms of care involving different treatment approaches as an alternative to an EP. This analysis does not value the costs or benefits associated with these treatments.

Intervention scenario represents individuals who receive treatment from an EP.

Key to the model is the EP impact factor which estimates the proportion of baseline costs (incurred under the counterfactual scenario) which could be avoided through EP intervention.

The analysis estimated the following costs within the intervention and counterfactual scenarios:

- **Service delivery costs**, including the per session cost of delivering services and the total sessions delivered per patient disaggregated by condition.

The analysis assessed these costs against the following benefits:

- **Avoided health system costs**, that included reduced hospital admissions, reduced emergency department presentations, and reduced medical expenses for general practitioner, specialist and allied health professional visits.
- **Productivity gains**, that included avoided absenteeism and presenteeism, and informal carer impacts.
- **Wellbeing improvements**, that included improved quality of life due to improvements in the management of each condition.

How can this report be used?

This report is intended to inform funding, commissioning and service-planning decisions by governments, insurers, compensable schemes, Primary Health Networks, local health services and other healthcare funders. The key policy question underlying this report is: where does investment in exercise physiology deliver value, and why should governments, insurers and compensable schemes invest in EP services?

The analysis demonstrates that investment in EP services generates economic and wellbeing benefits. Further, the analysis demonstrates that additional value attributable to expanding access to EPs. The findings may inform decisions regarding service expansion, referral pathways, funding models, workforce planning and investment in prevention, rehabilitation and return-to-work initiatives.

Results

The economic analysis estimated that delivering EP services generated a total net benefit of $1.09 billion, or an average net benefit of just over $2,000 per patient across a three-year time horizon. The benefits of the intervention were split across the health system (46% of all benefits) and productivity improvements (54% of benefits). Providing EP services was estimated to cost approximately $1,300 per patient over three years at a blended average estimated cost of $100 per session. The Benefit-cost ratio (BCR) for each estimated condition ranged from 2.3 – 3.0, with an average estimated BCR of 2.5.

There are approximately 9,870 EPs in Australia as of June 2026, delivering services to more than 940,000 patients annually. The selected conditions within this analysis were estimated to cover approximately 46% of this patient population. The economic benefits of EP intervention included avoided health system costs and productivity gains, minus the total cost of delivering EP services.

Condition group*	Total net benefit ($m)	Benefit per patient	BCR
Cardiovascular	$152.7	$1,937	2.5
Pulmonary	$21.0	$1,815	2.4
Musculoskeletal	$543.2	$2,113	2.6
Mental health	$168.9	$1,970	2.5
Physical disability	$144.5	$1,647	2.3
Cancer	$59.4	$2,609	3.0
Total conditions	**$1,089.8**	**$2,004**	**2.5**

Source: Deloitte Access Economics (2026).

In addition to economic benefits, EP services result in improvements to their patients' quality of life. These wellbeing benefits, although less tangible, remain a substantial aspect of the benefits derived by EPs.

EP services are expected to result in 18,072 Quality Adjusted Life Years (QALYs) gained over a three-year period. While this does not represent a direct economic return, it could be monetised using the Value of a Statistical Life Year (VSLY) to represent a total benefit of $4.6 billion across the six conditions.[i] Notably, this value is presented separately to the economic benefits due to the potential for double counting.

The value of EP services extends beyond the delivery of exercise alone. EPs provide structured, clinically informed and individually tailored interventions that are designed to improve functional capacity, build self-management skills and support sustained behaviour change.[6] Through ongoing assessment, exercise prescription, progression, education and coaching, EPs improve an individual's capacity to perform daily activities, participate in work and engage in community life. These improvements help reduce disease acuity, healthcare utilisation and care needs while increasing productivity, independence and wellbeing.[7] Economic benefits therefore arise not from physical activity itself, but from the functional, clinical and behavioural improvements that physical activity enables when delivered through an EP-led intervention.

EP services deliver additional benefits considered qualitatively within this report. These include benefits associated with:

- Improved community engagement and greater independence, enabling individuals to remain active in social, recreational, and work settings.
- Improved mood, fostering resilience, and reducing stress, which collectively contribute to better mental health and overall quality of life.
- Reduced frailty, particularly among older adults, supporting safer mobility, reducing reliance on carers, reduced hospital bed block and ambulance ramping.
- Decreasing fear avoidance behaviours related to exercise and diet, further reinforcing positive lifestyle changes and supporting long-term health outcomes.

[i] VSLY captures society's willingness to pay to reduce mortality risk. Comparatively QALYs capture changes in an individual's health-related quality of life. While these measures are similar, there are limitations using the VSLY to monetise QALYs and as such this estimate should be treated with caution.

Considerations in interpreting results

In estimating the value of investment is EP services, there were several considerations to the approach that inform how the results are interpreted including:

- **Isolating the impact of EPs** – the EP impact factor provides an estimate of the potential costs that could be avoided using an EP. However, in reality, individuals without access to an EP may seek alternative treatment through other allied health or medical professionals. This analysis has not valued the costs or benefits associated with alternative treatments.
- **Selection of condition groups** – Some patients may present with multiple conditions simultaneously. Results are presented per condition group to avoid double-counting but cannot fully account for comorbidity interactions across groups. The selected conditions account for approximately 46% of all services delivered by EPs, suggesting that there is a substantial proportion of benefits not captured within this analysis.
- **Time horizon of benefits** – It is recognised that the benefits of EP treatment may persist over time for many individuals, however exercise maintenance rates vary by condition, patient characteristics and post-EP support structures. Conservatively, this analysis uses a time horizon of three years with diminishing returns over time.
- **Financial return of benefits** – While real economic gains measured in this analysis are reported in dollar values, they may not materialise as cash savings. For example, in the case of hospitalisations, the service would need to be decommissioned to realise the cash saving. In practice, this benefit is realised in terms of a capacity gain instead. Further, some returns may be delayed relative to when costs are incurred.

Future opportunities

This report demonstrates the considerable economic benefits currently delivered by EPs in Australia. However, it is also recognised that the burden of physical inactivity is substantial and EPs cannot currently support the needs of all Australians.

This is especially relevant for people with chronic and complex conditions, where interacting comorbidities compound healthcare utilisation and erode independence and participation. Although an EP intervention may target a single condition, the resulting gains in functional capacity, self-management and participation typically extend across health, social and economic domains.

Expanding access to EP interventions has the potential to improve health outcomes, reduce avoidable healthcare utilisation, and support broader workforce and community participation outcomes. The future opportunities outlined below represent areas where greater integration, investment, and awareness of EP services may contribute to greater accessibility.

These opportunities will require careful planning, implementation, and evaluation to ensure they are delivered effectively and equitably. These opportunities include:

Future opportunities

1. Integrate EPs into end-to-end care across primary, secondary and community health settings to support prevention, early intervention, rehabilitation, and long-term management.
2. Integrate EPs within aged care more broadly to support healthy aging, self-management, and community participation.
3. Expanding the role of EPs within occupational rehabilitation and return-to-work pathways to ensure benefits of early intervention are realised.
4. Invest in evidence translation regarding the clinical and financial efficacy of exercise physiology in the broader community, public health system, and compensable schemes.
5. Increase awareness of exercise physiology among policymakers, employers and broader community.

1

Valuing the contribution of Exercise Physiologists in Australia:
An economic perspective

Background and context

This chapter explores the role of physical activity in reducing burden of disease, outlines the value of Accredited Exercise Physiologists, and introduces the context and scope of this engagement.

The role of physical inactivity in disease burden

Physical inactivity is a major risk factor for the development of chronic conditions including obesity, cardiovascular disease, osteoporosis, type 2 diabetes, dementia, and certain types of cancer. Engaging in adequate physical activity can improve symptoms, enhance physical functioning and quality of life, and in some conditions, slow disease progression and reduce risk of complications.[8,9] However, recent research from the Australian Institute of Health and Welfare (AIHW) indicates that 37% of adults aged 18-64 do not meet recommended physical activity guidelines, and 73% do not engage in adequate resistance training.[10]

> Physical activity is defined as any bodily movement produced by skeletal muscle that requires energy expenditure.[1] Exercise is a structured form of physical activity that elevates heart rate and breathing such as gym-based training, running, sport, swimming, or walking. Exercise intensity can be classified as light, moderate, or vigorous, and is associated with a wide range of immediate and long-term benefits to physical and mental health.[i]

As physical inactivity contributes to the onset and progression of many non-communicable conditions, exercise represents a key modifiable risk reduction factor for chronic disease.[11, 12] In 2018, physical inactivity was responsible for 20% of the total disease burden due to type 2 diabetes, 17% of uterine cancer burden, 16% of coronary heart disease burden, 12% of dementia burden and 9% of stroke burden.[13]

Physical activity also plays an important role in rehabilitation, injury management, and maintenance of functional independence. Injury accounts for a substantial volume of service demand in Australia, with 1.8 million injury-related emergency presentations and 575,345 hospitalisations in 2023-24.[14] Functional impairment is similarly prevalent, with 5.5 million Australians living with disability in 2022.[15] Exercise-based interventions have been shown to reduce pain, improve physical functioning and increase mobility in instances of injury management, post-injury rehabilitation and disability-related mobility limitations.[16,17, 18]

However, improving physical activity levels is not solely a matter of access to exercise or knowledge of its benefits. Sustained engagement in physical activity requires behavioural change, self-regulatory and motivational processes, and the development of consistent routines or habits.[19] For many individuals – particularly those living with chronic and complex health conditions – barriers such as low motivation, fear of injury, fluctuating symptoms and competing life demand can limit the ability to initiate and maintain regular activity.[20, 21] Improving functional capacity and long-term participation in physical activity often requires ongoing clinical guidance, behavioural and motivational support and strategies that reinforce adherence and sustained lifestyle change.[22, 23]

Exercise interventions for these populations need to be clinically appropriate, condition-specific, and delivered in a safe, structured and progressive manner by health professionals with expertise in exercise prescription.[24] This aligns directly with the scope of practice of Accredited Exercise Physiologists (EPs) who are trained to assess, prescribe, deliver and adapt exercise-based interventions to manage individuals with chronic and complex conditions.[25]

EPs as a targeted intervention

EPs are university-qualified allied health professionals who prescribe and deliver clinical exercise interventions to support disease prevention, rehabilitation and chronic disease management.[26] In Australia, EPs are accredited by Exercise & Sports Science Australia (ESSA), the peak professional organisation for university-qualified exercise and sports sciences practitioners. ESSA describes EPs as professionals who prescribe, deliver and adapt movement, physical activity and exercise-based interventions to optimise health status, function, recovery and independence across the full health spectrum.[27] This includes people with chronic and complex conditions, disability and age-related conditions.

The value of EPs lies in their ability to deliver structured, individually tailored and clinically informed interventions that extend beyond the non-clinical exercise support typically offered in general fitness settings. EP services integrate therapeutic implementation of exercise with health and physical activity education, lifestyle modification, behavioural change support and progression over time. Interventions are customised to individual factors – including comorbidities, functional limitations, risk profiles and motivation levels – to improve adherence and support sustained long-term behaviour change.[28]

EP services are delivered across a range of settings, including public and private hospitals, allied health clinics, primary care, aged care facilities, occupational rehabilitation, disability services, and community-based exercise facilities.[29, 30] EPs also play a role in multidisciplinary care teams, supporting coordinated, patient-centred management.

EPs commonly work with individuals affected by musculoskeletal, cardiovascular, pulmonary, metabolic, neurological, cancer-related and mental health conditions, as well as those recovering from injury or living with disability.[31, 32, 33] Their role spans the continuum of care from preventing the onset and progression of disease, to reducing condition acuity, restoring physical function, supporting recovery, and enabling individuals to effectively self-manage chronic conditions within the community.

[i] Department of Health, Disability and Ageing. (2026). About Physical Activity. DoHDA, Australian Government. https://www.health.gov.au/topics/physical-activity/about-physical-activity

This engagement

Deloitte Access Economics was engaged by ESSA to estimate the value generated through investment in EP services in Australia relative to six in-scope conditions: cardiovascular, pulmonary, musculoskeletal, mental health, physical disability and cancer. The analysis aims to inform a range of stakeholders including the healthcare sector, policymakers, media, and the public about the role of EPs, their contribution to reducing avoidable costs within the health system and the disease burden in Australia.

This report estimates the value of EPs using an economic analysis approach focused on six key health conditions. These conditions were selected based on their prevalence and the extent to which they can be supported through physical activity and lifestyle interventions delivered by EPs. Whilst this report focuses on the chronic nature of the conditions, it is acknowledged that EPs also play a significant role in managing a broader range of both chronic and non-chronic conditions beyond the scope of this analysis.

The methodology underpinning this analysis was developed and tested with a Project Advisory Group convened by ESSA, comprising EPs and researchers.

Through a series of workshops – each focused on a specific component of the methodology – the group provided expert advice, data, and insights informed by current research and practice. These workshops informed the EP intervention value framework, as well as the approach to assessing the costs and benefits associated with EP intervention, including the key methodological assumptions and considerations underpinning the analysis.

The rest of this report is structured as follows:

- **Chapter 2** outlines the role of EPs
- **Chapter 3** presents the approach to economic analysis
- **Chapter 4** estimates the value of EPs
- **Chapter 5** outlines the future opportunities which may be used to enhance the value generated by EPs
- **Appendix A** provides technical methodology notes regarding the approach to the analysis
- **Appendix B** presents the sensitivity analysis to better understand the impact of key parameters.

Scope of conditions considered in this analysis

This report focuses on six prevalent health conditions that are commonly supported through physical activity and lifestyle interventions delivered by EPs. These conditions were identified based on available evidence indicating the conditions most frequently managed by EPs in practice. Collectively, they represent a substantial proportion of EP service delivery, estimated to account for approximately 46% of conditions managed by the profession.

The conditions included in this analysis are cardiovascular, pulmonary, musculoskeletal, mental health, cancer-related conditions, and physical disability. While this report examines these conditions through a cost-benefit lens, it is acknowledged that EPs support a broader range of health conditions that fall outside the scope of this analysis.

In this report, physical disability is considered alongside chronic health conditions, as it typically persists over time and is often comorbid with other long-term conditions. It is also important to note that there may be overlap across these conditions, with many individuals presenting with multiple comorbidities, further reinforcing the need for tailored, multidisciplinary approaches to care.

Cardiovascular conditions
(e.g. coronary heart disease, heart failure, stroke)

CASE STUDY

Joe
58 year old male

Referred by a GP due to cardiometabolic risk factors (pre-diabetes, elevated blood pressure, central obesity & high cholesterol). Experiences recurrent low back pain, fatigue, low confidence exercising. Declining physical activity, family history of myocardial infarction, elevated stress and social withdrawal.

Prevalent population
4,481,100

EP treated
78,878
1.8% population

Pulmonary conditions
(e.g. Chronic Obstructive Pulmonary Disease (COPD), asthma)

CASE STUDY

David
65 year old male

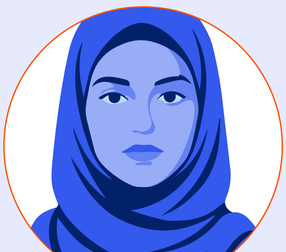
Referred by for rehabilitation by respiratory specialist due to severe asthma, chronic COPD and emphysema. Experiencing below average strength, balance, quality of life and walking capacity. Rapid desaturating to below 85% with low levels of exertion.

Prevalent population
3,363,300

EP treated
11,578
0.3% population

Musculoskeletal conditions
(e.g. osteoarthritis, osteoporosis, fracture)

CASE STUDY



Georgia
26 year old female

Referred by GP 12-months after a workplace injury, WorkCover claim with chronic lower back pain due to S1 radiculopathy. Experiencing persistent pain, restricted movement, and reduced functional capacity. Recently reviewed by a neurosurgeon who recommended lumbar fusion surgery.

Prevalent population
4,730,700

EP treated
257,117
5.4% population

Mental health conditions
(e.g. depression, anxiety)

CASE STUDY

Marcus
32 year old male

Referred by GP under Department of Veterans Affairs (DVA) funded treatment cycle, civilian transition from Australian Defence Force with Post Traumatic Stress Disorder (PTSD). Experiencing hyperarousal, poor sleep, low mood, avoidance of crowded environments, declining physical activity. Receiving psychological support but reporting low motivation, reduced confidence exercising, difficulty rebuilding structure.

Prevalent population
7,407,600

EP treated
85,728
1.2% population

Physical disability
(e.g. functional impairment)

CASE STUDY

Pamela
79 year old female

Residing in supported independent living community, referred by geriatrician due to two falls within a 6-month period. History of osteoporosis, chronic knee pain and declining mobility. Experiencing difficulty managing activities of daily living safely and confidently, resulting in social withdrawal and anxiety.

Prevalent population
3,094,800

EP treated
87,758
2.8% population

Cancer
(e.g. ovarian, lung, breast)

CASE STUDY

Belinda
44 year old female

Referred by gynaecological oncologist following surgery, undergoing adjuvant chemotherapy for ovarian cancer. Experiencing fatigue, reduced physical activity, abdominal discomfort, low confidence with exercise, difficulty resuming usual work and family routines. Increasing concern regarding loss of independence during chemotherapy treatment.

Prevalent population
571,600

EP treated
22,757
4% population

Source (data): Australian Bureau of Statistics (ABS) National Health Survey 2022, NHCDC Admitted Care Data 2022-23.
Source (case studies): Deloitte Access Economics & ESSA Project Advisory Group (2026). Estimates based off ESSA data.

2

Valuing the contribution of Exercise Physiologists in Australia:
An economic perspective

Understanding the role of an Exercise Physiologist

This section explores an EP's scope of practice, the range of conditions and contexts they operate within and relevant service delivery pathways, and introduces the EP Intervention Value Framework, developed via co-design workshops underpinning and the economic model.

Scope of practice of EPs

EPs are university qualified allied health professionals who specialise in the assessment, prescription and delivery of clinical exercise-based interventions. They design, deliver and adapt movement, physical activity and exercise interventions to optimise physical functioning, recovery, independence and participation across the health spectrum.

Exercise Physiology has broad clinical application in Australia. Rather than being limited to a single disease group or condition, EPs support individuals whose health status, symptoms, or functional capacity can be improved through structured and individually tailored exercise interventions. In practice, EP services span multiple physiological systems and care pathways, with interventions tailored to an individual's condition, symptoms, risk profile, and functional goals.

The EP role integrates clinical exercise prescription with behaviour change support, ongoing monitoring and progression over time. This enables exercise to be delivered safely, effectively and sustainably as part of rehabilitation, prevention, and chronic condition management pathways.

ESSA's EP Scope of Practice outlines the minimum activities, roles and professional standards expected of EPs, noting it is not an exhaustive list of potential practice areas. The scope is intentionally flexible, allowing EPs to respond to evolving models of care and changing patient needs. EPs provide services across the full health spectrum, including healthy populations, individuals at risk of developing health conditions, and those living with chronic or complex conditions, disability, and age-related conditions.

EPs apply evidence-based clinical reasoning and professional judgement to deliver exercise-based interventions across a wide range of settings, including personal injury, workplace health and rehabilitation, public and private hospitals, community health services, and private practice.

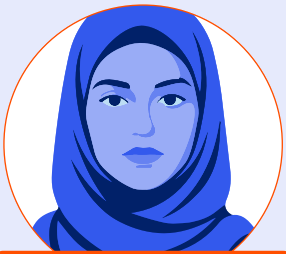
EPs work with people across a broad range of chronic health conditions, injuries and functional impairments. ESSA's Exercise Right resources indicate that EP care is relevant to a range conditions, including:[34]

- **Cardiovascular conditions:** Coronary artery disease, myocardial infarction, hypertension, dyslipidaemia, stroke
- **Metabolic conditions:** Type 2 diabetes, obesity and weight management, insulin resistance, type 1 diabetes
- **Respiratory conditions:** Asthma, COPD, emphysema, cystic fibrosis
- **Musculoskeletal conditions:** Arthritis, osteoporosis, chronic pain, spinal cord injury, fracture prevention and reconditioning
- **Neurological conditions:** Acquired brain injury, Parkinson's disease, cerebral palsy, multiple sclerosis
- **Mental health conditions:** Anxiety, depression, PTSD
- **Age related functional decline:** Sarcopenia, falls risk, frailty, reconditioning after illness or hospitalisation
- **Women's health conditions:** Polycystic ovarian syndrome, menopause, postnatal support, pelvic organ prolapse, urinary incontinence
- **Cancer:** Functional decline during chemotherapy, post-treatment recovery
- **Injury, rehabilitation and post-surgical recovery**
- **Disability related functional impairments**
- **Chronic pain and fatigue related conditions**
- **Solid organ transplant rehabilitation**

Distinct care pathways an EP can deliver include:

Musculoskeletal conditions
(e.g. osteoarthritis, osteoporosis, fracture)

CASE STUDY



Georgia
26 year old female

An EP developed a graded exercise physiology program focussed on reducing pain, improving spinal and lower-limb function, and supporting safe return to pre-injury capacity. The program commenced with hydrotherapy to support low-impact movement. It progressively transitioned to gym-based exercises including mobility work, graded strength and movement retraining, functional lifting and workplace-relevant conditioning to rebuild confidence and physical tolerance. Georgia's progress was closely monitored, with weekly review over eight months. Exercise intensity and functional complexity was gradually progressed as pain, strength and range of movement improved.

Mental health conditions
(e.g. depression, anxiety)

CASE STUDY

Marcus
32 year old male

An EP developed an individualised exercise program focussed on improving physical and psychological functioning, rebuilding routine and reducing avoidance behaviours. The program commenced in a low-stimulus gym environment and used self-paced aerobic exercise, introductory resistance training, mobility work and breathing strategies to support safe participation. Exercise selection drew on Marcus' previous military training background, while being adapted to avoid over-arousal and support consistency outside supervised sessions.

Marcus completed an initial 12-session DVA treatment cycle weekly over three months, with progress reviewed in collaboration with his GP and psychologist. The plan was renewed to support continued progression toward independent self-management. Exercise intensity and complexity were gradually increased as his sleep, confidence and exercise tolerance improved. The program also included a structured home exercise plan, walking goals and strategies to help Marcus use physical activity as part of his broader PTSD management plan alongside psychological care.

Cancer
(e.g. ovarian, lung, breast)

CASE STUDY

Belinda
44 year old female

An EP developed an individualised exercise program integrated with Belinda's broader oncology care plan. Over an initial 12-week period, she attended weekly supervised sessions focused on managing cancer-related fatigue, rebuilding strength and aerobic capacity, supporting recovery from treatment, and maintaining function during chemotherapy. Exercise was adapted to treatment cycles, symptom fluctuation and post-surgical recovery, and included low to moderate intensity aerobic exercise, progressive resistance training, mobility work and strategies to safely increase daily movement. Belinda's program was reviewed regularly and progressed in line with her tolerance, symptom burden and recovery goals. As treatment side effects stabilised, she transitioned to a combination of home-based exercise and fortnightly supervised review over three months, with a focus on rebuilding physical confidence and returning to usual activities.

Source: Deloitte Access Economics & ESSA Project Advisory Group (2026).

EP service delivery pathways

EP services are delivered through a range of entry points, funding mechanisms, and care settings spanning the health, disability, compensable injury, and private care systems. These pathways shape access to services, referral processes, the intensity and duration of treatment, and the broader multidisciplinary context in which care is delivered.

EPs practice across a diverse range of care settings, reflecting the broad clinical applicability of exercise physiology. These include primary care, private allied health clinics, public and private hospitals, community health services, aged care, disability services, occupational rehabilitation, workplace health programs, and home-based or telehealth environments. Within these settings, EPs frequently operate as part of multidisciplinary teams, contributing to coordinated, patient-centred models of care alongside medical practitioners and other allied health professionals.

Access to EP services is typically facilitated through formal referral pathways, most commonly from GPs under structured care arrangements, e.g. chronic condition management plans. However, referral pathways can vary depending on the funding model and care setting. In public and community-based systems, referrals may also be initiated by specialists or multidisciplinary teams, while in privately funded care, individuals may access services directly or through informal referrals from other health professionals. In disability and compensable injury schemes, access is often determined through approved plans, case managers, or insurer-driven pathways, reflecting program-specific eligibility criteria and therapeutic goals.

Funding for EP services is similarly diverse, encompassing public programs (e.g. Medicare Benefits Schedule (MBS), and Support at Home Scheme), targeted schemes (e.g. DVA), disability supports (e.g. National Disability Insurance Scheme (NDIS)), compensable injury systems (e.g. workers' compensation and motor accident schemes), and private funding mechanisms, including out-of-pocket payments and private health insurance. Each funding pathway influences not only eligibility and access, but also the scope, frequency, and duration of services provided, as well as the goals of care (e.g. prevention, rehabilitation, return to work, or functional independence).

Together, these referral pathways, care settings, and funding mechanisms underpin the delivery of EP services in Australia, enabling exercise physiology interventions to be tailored to diverse patient needs, clinical contexts, and system priorities. A summary of the key funding pathways, care settings, and referral mechanisms included in this analysis is provided in Table 2.1.

Table 2.1: Overview of EP funding, care and referral pathways.

Funding pathway	Care setting	Referral pathway
Medicare Benefits Scheme	Primary care, private practice, community allied health clinics	GP referral under a chronic condition management plan
Support at Home Scheme	Aged-care services delivered in the home, community, and allied health settings	Assessment via MyAgedCare (can be commenced by individual or medical professional)
Department of Veterans' Affairs	Private practice, community care, eligible allied health settings	GP or specialist referral under DVA treatment arrangements
National Disability Insurance Scheme	Disability services, community-based practice, home and community settings	Approved NDIS plan, where EP intervention is funded in relation to disability capacity building and supports
Workers' compensation and motor accident schemes	Occupational rehabilitation, workplace health, private clinics, insurer-funded rehabilitation settings	Compensable injury scheme
Private funding and private health insurance	Private practice, multidisciplinary clinics, gyms, telehealth and preventative care settings	Direct access, or referral from GP, specialist or allied health practitioner

Source: Deloitte Access Economics (2026).

EP intervention value framework: a logic model

The EP Intervention Value Framework was developed through a co-design workshop with a Project Advisory Group comprising EPs and subject matter experts, representing a range of backgrounds, care settings, and clinical specialisations.

The framework applies a logic model approach to map how EP service inputs and activities translate into outputs, outcomes, and longer-term impacts. It was developed to establish a more detailed and nuanced understanding of an EPs scope of practice, the mechanisms through which EPs generate value, and the pathways through which exercise physiology intervention contribute to improved wellbeing and economic benefits.

The co-designed EP logic model subsequently informed development of the benefits framework and economic modelling approach, ensuring the analysis reflects real-world service delivery and pathways to impact.

The EP logic model has four key components:

- **Inputs:** the resources, infrastructure and enabling factors required to deliver EP services, including the qualified EP workforce, funding mechanisms, referral pathways, exercise facilities, and clinical guidelines.
- **Activities:** the core EP services delivered using those inputs, such as client assessment, exercise prescription, guided exercise interventions, behavioural change support and program reviews.
- **Outputs:** the direct and measurable products of EP service delivery, including the number of clients assessed, sessions delivered, and referrals received.
- **Outcomes:** the short, medium and long-term changes that occur as a result of EP service delivery, such as improved strength, functional capacity, quality of life and exercise participation.

For the purposes of this framework, an additional system benefits component has also been included to capture the broader impacts of EP interventions. These include potential benefits to the health system and wider economy such as reduced healthcare utilisation, avoided costs, improved productivity and enhanced participation. It is important to note that not all benefits can be readily quantified. Some impacts are inherently qualitative – such as improvements in confidence, and independence – and, while not easily expressed in monetary terms, are nevertheless critical to understanding the full value of EP interventions. Where feasible, outcomes are quantified and expressed in monetary terms.

The framework demonstrates that exercise and physical activity should be understood as intervention mechanisms rather than end outcomes. Through EP-led intervention, exercise contributes to improvements in functional, clinical and psychological outcomes, which in turn support greater participation, productivity, independence and broader wellbeing. These pathways ultimately generate health system, wellbeing and productivity benefits.

Figure 2.1: Overview of EP Intervention Value Framework.

AEP SCOPE OF PRACTICE AND OUTPUTS | OUTCOMES | IMPACTS

INPUTS
Resources invested to deliver activities.

ACTIVITIES
Activities that use the inputs, including tools, processes or events.

OUTPUTS
The tangible products, including units of service, delivered by activities.

OUTCOMES
Direct results of activities and long-term consequences of the program.

SYSTEM BENEFITS
Benefits to the health system and economy.

Inputs

- Workforce
- Referral Pathways
- Funding
- Technology
- Client Resourcing
- Infrastructure
- Clinical guidelines

Activities

Initial Assessment
Functional capacity, clinical history, goal setting, exercise testing, needs determination.

Exercise Prescription & Delivery
In-person or virtual consultations, safety monitoring, exercise plan development, supervised exercise.

Health Coaching & Education
Behaviour change counselling, patient education, biopsychosocial considerations, capacity building.

Outcome Measurement & Progress Review
Program modification, medical case conferencing.

Administration
Referral management, billing, case notes, phone calls, emails, compensable scheme submissions and audits.

Care Coordination
GP letters, MDT participation, interpreting clinical reports, onward referrals, home or community visits.

Research & Quality Improvement
Clinical outcomes (PROMS), upskilling, reviewing evidence-based practice, clinical supervision.

Reporting
Service activity, safety and quality metrics, discharge and NDIS reports, alignment to NSQHS standards.

Outputs

- Number of assessments completed.
- Number of exercise physiology consultations delivered.
- Number of supervised exercise sessions delivered (personal and/or group).
- Number of patient education materials distributed.
- Number of health coaching sessions delivered.
- Number of progress and discharge reports.
- Number of outcome assessments completed.
- Number of self-management plans developed.
- Number referrals and service discharges.
- Number of published research papers.

Outcomes

Short term (0-6 months)

Medium – long term (6+ months)

Functional Outcomes

- Strength, balance, coordination
- Improved exercise tolerance
- Reduced pain, improved mobility and functionality
- Improved ability to return to work
- Ability to undertake activities of daily living (ADL)
- Economic participation
- Community participation
- Improved function despite chronic pain
- Return to work
- Improved independence with undertaking ADLs

Clinical Outcomes

- Reduced resting HR & BP
- Improved lung function
- Improved lipid profile
- Reduced inflammatory markers
- Improved fatigue management
- Reduced secondary incidence of disease
- Disease stabilisation
- Reduced preventable hospitalisation
- Reduced morbidity and mortality
- Reduction in disease prevalence
- Reduction in surgical intervention

Psychosocial Outcomes

- Improved mood, motivation and self-efficacy
- Return to family, social and community engagements
- Reduction in anxious and depressive symptoms
- Sustained behavioural change
- Improved quality of life
- Improved health literacy
- Self management of symptoms
- Sustained health and wellbeing
- Reduced need for care

System Benefits

Avoided Healthcare Costs

- Acute hospitalisations (LOS & readmissions)
- GP & specialist visit cost
- Medication costs
- ED presentations
- Averted aged care transitions
- Low-value surgeries
- Travel costs for medical specialists / VMOs

Wellbeing Gains

- Quality of Life
- Engagement in community, social and family events
- Independence

Productivity Gains

- Absenteeism + presenteeism
- Return to work
- Carer burden & informal care costs
- NDIS disability support costs
- Workcover payments
- NWAU gains (care efficiency)

Source: Deloitte Access Economics & ESSA Project Advisory Group (2026).

3

Valuing the contribution of Exercise Physiologists in Australia:
An economic perspective

Approach to economic analysis

This chapter presents the economic analysis of EP services in Australia. The analysis quantifies the value of EP interventions across six condition groups: cardiovascular disease, pulmonary disease, musculoskeletal conditions, mental health, physical disability and cancer.

Methodology

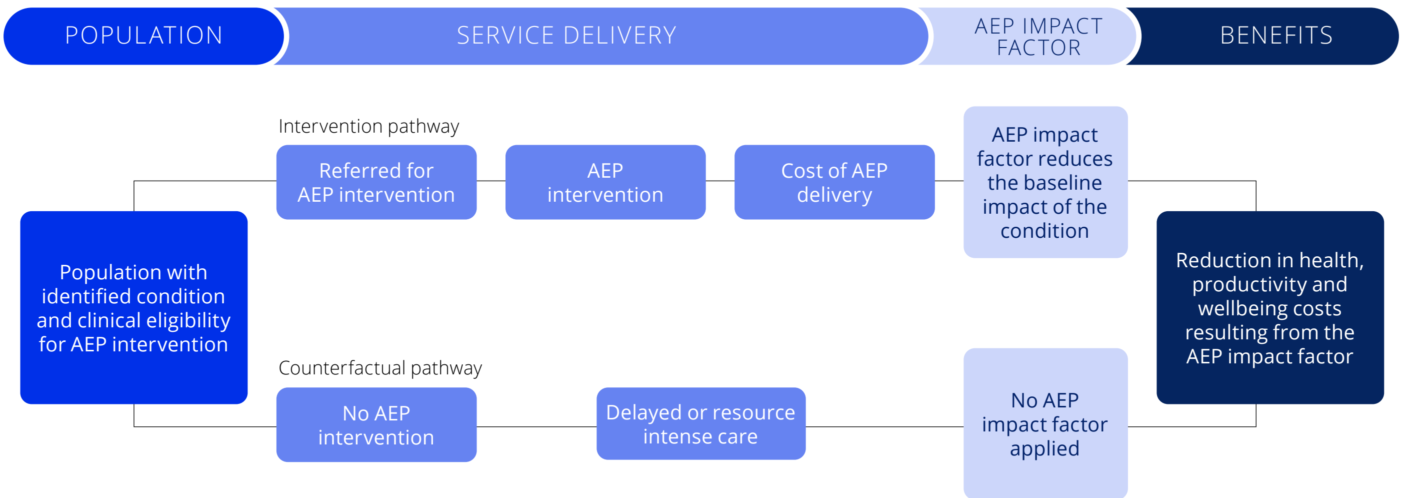
The analysis uses an economic analysis to estimate the economic value of EP intervention from a societal perspective, consistent with approaches used in allied health economic evaluations. Figure 3.1 presents the high-level model framework developed and refined through consultation with the co-design working group. The model compared a counterfactual scenario in which patients receive standards care without EP services, with an intervention scenario in which EP care is provided. The economic benefit of EP intervention is measured as the difference between these scenarios across health system savings, productivity gains, and wellbeing gains.

The analysis covers six condition groups: cardiovascular disease, pulmonary disease, musculoskeletal conditions, mental health, physical disability and cancer.

The model framework is broken down into four key modelling steps:

- **Population** – The current population who receive care from an EP and who meet the defined condition criteria
- **Service delivery** – Estimating the cost of EP intervention relative to the counterfactual where no EP intervention is provided
- **EP impact factor** – Deriving the reduction in the baseline costs of the condition which can be attributed to the EP intervention
- **Benefits** – Applying the EP impact factor to the baseline costs of the condition to estimate the total avoided costs.

Figure 3.1: Schematic overview of framework for modelling benefits of EP intervention.



Source: Deloitte Access Economics (2026).

Approach to the economic analysis

Economic analysis has been tailored based on the available data from ESSA and other nationally representative datasets. As per the framework presented in Figure 3.1, four steps were developed to estimate the economic value of EPs. These steps include:

- Defining the EP treated population
- Assessing the costs associated with EP service delivery
- Quantifying the EP impact factor
- Understanding the qualitative and quantitative benefits of EP intervention across a three year time horizon

Each of these steps is outlined in detail in the below subsections.

1

Defining the EP treated population

The EP treated population refers to the number of individuals who received an EP intervention for one of the six in scope conditions in the most recent year of available data.

The population was estimated from the ESSA Headcount Survey (2025), which reports EP headcount by condition group and estimated total number of weekly patients seen. The annual number of patients seen per condition group was estimated by:

total annual patients seen by an EP ÷ an assumed average of 10 sessions per patient per year

See Appendix A, Section A.2 for full patient volume assumptions by condition.

The population is presented by condition noting the potential double counting limitation (see Section 3.4 Model Limitations).

2

Assessing the costs associated with EP service delivery

The population derived from step one each receive an EP intervention (within the intervention arm) or no treatment (with the counterfactual). The costs of the EP intervention were derived by estimating:

- The cost per session, and
- Sessions received.

Cost per session

The central estimate of EP intervention cost is based on a blended average per-session rate drawn from common funding sources for EP services:

- MBS: item 10953 fee of $72.65 for a 30-minute session[35]
- DVA: average fee for initial and subsequent consultations of $75.10 for 30-minutes[36]
- NDIS: metropolitan price limit of $167 per hour session[37]
- Workcover (individual): $223 per hour, Workcover (group): $56 per hour[38]

Together, these funding sources imply a blended average cost of $100 per session, which was validated through stakeholder workshops. It is noted that session duration and complexity may differ across individuals which is implicitly accounted for by this blended average. However, this per session figure does not reflect an hourly rate for EP services, and should not be interpreted as a benchmarked, recommended, or sustainable fee structure.

It should also be noted that current funding arrangements may limit access to EP services for some individuals. Compensable schemes often deliver limited subsidised sessions and can have strict eligibility criteria, potentially leading to high out-of-pocket costs for individuals needing to access EP care. This may create barriers to ongoing care.

See Appendix A, Section A.2 for the full-service cost assumptions and session schedule.

Sessions received

Sessions received was estimated via consultation with the Project Advisory Group convened by ESSA, comprising EPs and researchers. A total of 10 sessions per EP patient in year 1 and an additional 4 sessions per EP patient in year 2 was assumed for the purpose of this economic analysis.

In the counterfactual scenario, no EP treatment is delivered, so there are zero costs associated with service delivery. It should be noted that, in both scenarios, patients receive standard care from a multidisciplinary team of clinicians. Since this standard care is provided regardless of the scenario, its associated costs are excluded from the model.

3

Quantifying the EP impact factor

The EP impact factor is the proportional improvement in health or economic outcomes attributable to EP intervention relative to the counterfactual of standard care without EP.

The EP impact factor is condition-specific and is the most sensitive input in the model. The impact factor was derived from a structured literature scan, including broader exercise-intervention evidence, across all six condition groups. A weighted average EP impact factor was derived to account for variability in treatment volumes by conditions. **An EP impact factor was calculated at 39%.**

A summary of the literature is outlined in Table 3.1 below. Some studies were conducted on more acute clinical populations while others targeted community-based prevalent groups. Within condition groups, interventions focussed on different sub-conditions, and the type and intensity of exercise varied considerably. To account for this, condition specific EP impact factors were aggregated into a single weighted EP impact factor, which accounts for each condition and the EP treated population by condition. It should be noted that the available literature was limited to exercise-based interventions only, rather than EP-supported exercise interventions.

Table 3.1: Summary of literature informing EP impact factor.

Condition	Service type	Effect size (average)	Summary
Cardiovascular	Hospital admission	27%	Studies found an average hospitalisation diversion rate of 27% in patients with coronary heart disease who received cardiac rehabilitation compared to non-exercise control groups.[39, 40, 41]
Pulmonary	Hospital admission, Emergency Department (ED) presentation	41%	Studies found an average hospitalisation and ED presentation diversion rate of 41% in patients with Chronic Obstructive Pulmonary Disease who received exercise-based pulmonary rehabilitation compared to control groups.[42, 43, 44,45,46]
Musculoskeletal	Hospital admission, care avoidance	44%	Studies found an average hospitalisation and care diversion rate of 44% in patients with musculoskeletal conditions who received exercise-based interventions compared to control groups.[47, 48, 49, 50]
Mental health	Mental health effect size (assumed care avoidance)	55%	Studies found an average reduction in mental health symptom severity of 55% in patients who received exercise-based interventions compared to control groups. [51, 52, 53]
Physical disability	Hospital admission, morbidity	16%	Studies found a combined average reduction in morbidity and diversion from hospitalisation of 16% in patients with physical disability who received exercise-based interventions compared to control groups.[54, 55, 56, 57]
Cancer	Hospital admission	42%	Studies found an average hospitalisation diversion rate of 42% in patients with cancer who received exercise-based interventions compared to control groups.[58, 59, 60, 61]
Weighted average EP impact factor		39%	

Source: Deloitte Access Economics (2026).

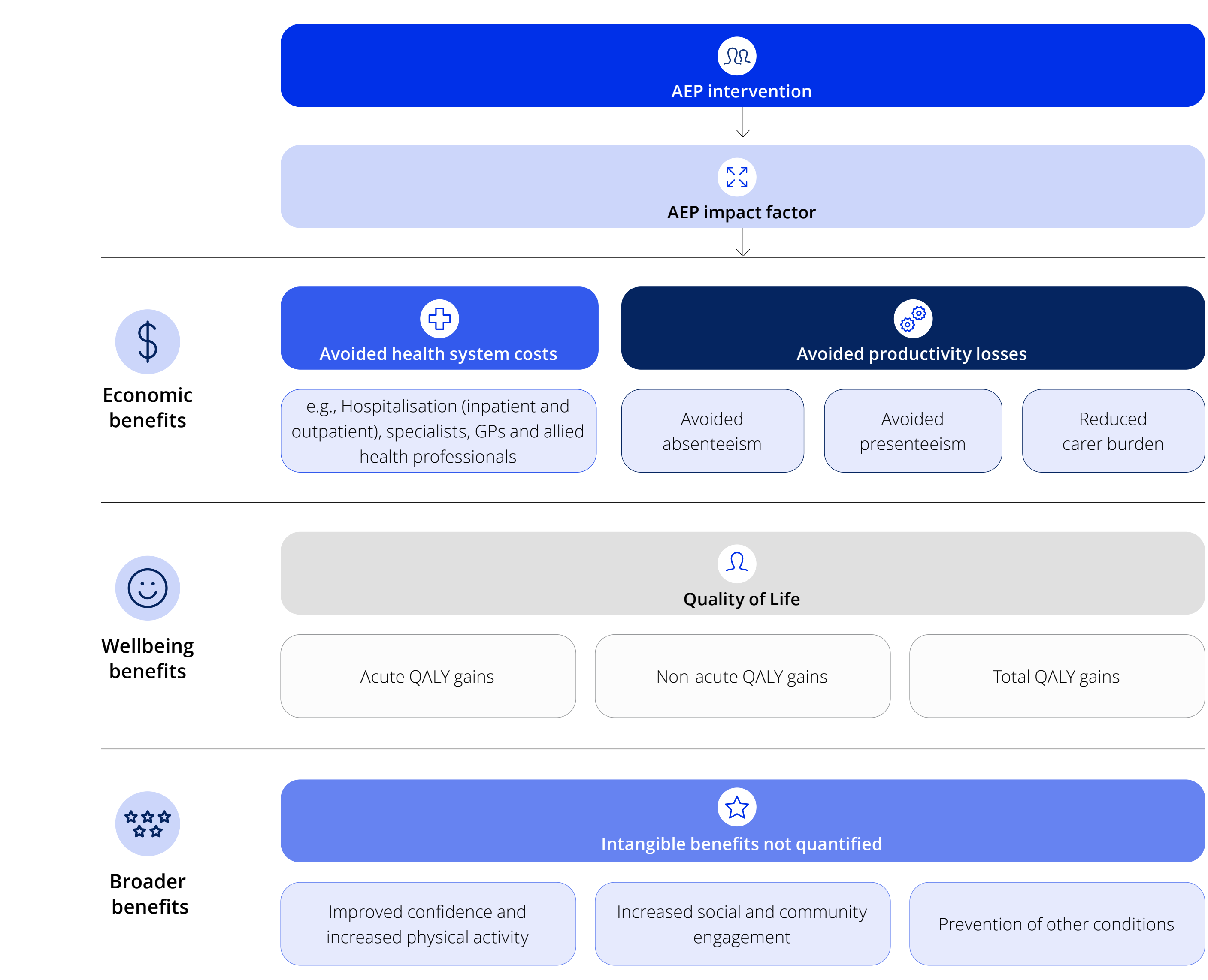
See Appendix A, Section A.3 for the full derivation methodology, condition-specific impact factor values by literature source, and applied weightings. This value is also tested within sensitivity analysis.

4

Understanding the qualitative and quantitative benefits of EP intervention over a three-year time horizon

The benefits considered within this economic analysis included economic and wellbeing benefits. Benefits were assessed across a three-year time horizon to account for the ongoing and latent positive impact of EP intervention, particularly increased physical activity and sustained behavioural change. The economic benefits extended across both the health system and on productivity. This is shown in Figure 3.2.

Figure 3.2: Benefit framework for EP intervention.



Source: Deloitte Access Economics (2026).

Counterfactual health service utilisation rates represent what an EP-treated patient would incur without EP services in place. Per patient service utilisation rates are derived from national activity datasets (including the National Health Survey) by dividing total condition-specific service volumes by the prevalent population and associated unit costs.

Avoided health system benefits are derived from applying an EP impact factor to the counterfactual utilisation rate to derive the intervention scenario rate.

Counterfactual productivity impacts represent what an EP-treated patient would incur in terms of lost time and productivity without EP services in place. Productivity impacts included:

- **Absenteeism** captures time away from paid work due to ongoing health conditions, as well as other impacts such as pain. It is estimated based on the number of working-age patients in the EP treated cohort, base days lost due to the condition, a daily wage rate, and the EP impact factor.
- **Presenteeism** captures reduced productivity when a person remains at work but is unable to perform at full capacity due to a health condition. It is estimated based on the number of working-age patients, average return-to-work rates, proportional productivity loss over a one-year period, and the EP impact factor.
- **Informal carer burden** is estimated for avoided hospitalisations and ED presentations using average length of stay (LOS), with a loading factor applied to account for recovery and discharge support. Carer burden is calculated by taking the patient cohort who avoided ED presentation or admission, estimating their LOS and time for recovery per episode avoided, and attributed an estimated carer opportunity cost. This represents a conservative approach noting that the informal carer burden is likely to extend beyond the time spend in hospital for many people.

Wellbeing gains are measured as the improvement in EuroQol 5-Dimension health-related quality of life measure (EQ-5D) utility between the counterfactual and intervention scenarios, expressed as QALYs. The analysis estimates a change in utility between the general population and people with each of the in-scope conditions. The EP impact factor is applied to this difference to approximate the potential QALYs gained from the intervention.

Model outputs

To determine the total value of EPs the total costs of the intervention arm were compared to the incremental benefits achieved. That is, the costs of delivering EP services (step 2 of the methodology) were compared to the net benefits (the reduction in costs in the intervention arm relative to the baseline costs estimated in the counterfactual). This calculation was used to derive the net benefit and BCR. The benefits of avoided wellbeing losses were calculated in addition to the net economic benefit and BCR.

Model limitations

The analysis identified several limitations which should be considered when interpreting the results of this analysis. Additional sensitivity analysis was undertaken to examine assumptions supported by limited evidence, to better understand their impact on findings.

Key assumptions underpinning the model and flow of benefits across a three-year time horizon are as follows:

– In the first year, patients receive 8 to 10 EP-supervised sessions.

– In the second year, a reduced program of approximately 4 sessions supports maintenance and self-management.

– In the third year, patients are assumed to maintain exercise behaviour independently, without EP sessions.

The sensitivity analysis is presented in Appendix B. The limitations are presented below:

- **Isolating the impact of EPs:** the EP impact factor provides an estimate of the potential costs that could be avoided using an EP. However, in reality, individuals without access to an EP may seek alternative treatment through medical practitioners or other allied health professionals. This analysis has not valued the costs or benefits associated with alternative treatments.

- **EP impact factor:** the evidence base for EP-specific effects on service utilisation is limited. The model applies a blended weighted average across conditions, which does not capture condition-level variation. There is likely to be substantial variation in the impact factor when applied to different benefits (e.g. hospitalisations compared to productivity outcomes), however these differences could not be established.

- **Selection of condition group:** Some patients may present with multiple conditions simultaneously. Results are presented per condition group to avoid double-counting but cannot fully account for comorbidity interactions across groups. The selected conditions account for approximately 46% of all services delivered by EPs, suggesting that there is a substantial proportion of benefits not captured within this analysis.

- **Time horizon of benefits:** It is recognised that the benefits of EP treatment may persist over time for many individuals, however exercise maintenance rates vary by condition, patient characteristics and post-EP support structures. Conservatively, this analysis uses a time horizon of three years with diminishing returns over time.

- **Financial return of benefits:** While real economic gains measured in this analysis are reported in dollar values, they may not materialise as cash savings. For example, in the case of hospitalisations, the service would need to be decommissioned to realise the cash saving. In practice, this benefit is realised in terms of a capacity gain instead. Further, some returns may be delayed relative to when costs are incurred.

- **Non-mutually exclusive condition groups:** patients may present with multiple conditions simultaneously. The results were estimated assuming a single condition per person to avoid double-counting. As such the analysis does not account for comorbidity interactions across condition groups.

- **Heterogeneity of the EP system:** care settings (public vs private), funding sources (MBS, NDIS, DVA, Private, WorkCover, Support at Home Scheme), patient mix and session types (e.g. group vs individual) types vary across conditions, geographies and individual EPs. The approach to costing of EP service events represents a blended average estimate, which does not fully capture range of services in practice. This uncertainty is partially tested within the sensitivity analysis.

- **EP patient count estimation:** unique patient counts are estimated from ESSA workforce census data and an assumed average session frequency. These figures have not been directly validated against MBS item volumes or NDIS participant data.

- **Pharmaceutical costs excluded:** potential reductions in pharmaceutical consumption are not quantified due to limitations in isolating the EP-attributable reduction in Pharmaceutical Benefits Scheme (PBS) expenditure at condition-specific level. This is a conservative exclusion.

4

Results: the value of Exercise Physiologists

This chapter presents the estimates value of EPs in economic terms, and an assessment of the wellbeing benefits that could be generated.

The results of the economic analysis are presented in Table 4.1 below. Across the six in scope conditions, EP interventions generate a total net benefit of approximately $1.09 billion over a three-year period. This is equivalent to an average benefit of $2,004 per patient, and an overall BCR of 2.5. Net benefits are positive across all condition groups, indicating that estimated productivity gains and avoided health system costs exceed the cost associated with EP service delivery. Musculoskeletal conditions account for the largest share of total net benefits, reflecting both the population size and the scale of estimated avoided costs and productivity gains. Cancer accounts for the highest benefit per patient and BCR, while cardiovascular, mental health, pulmonary and physical disability condition groups also demonstrate consistent positive returns. These results suggest that EP services deliver value across a broad range of chronic and complex conditions, with benefits accruing across both the health system and broader economy.

Table 4.1: Summary of economic results by condition group (over three-year period).

Condition group*	Total net benefit ($m)	Benefit per patient	BCR
Cardiovascular	$152.7	$1,937	2.5
Pulmonary	$21.0	$1,815	2.4
Musculoskeletal	$543.2	$2,113	2.6
Mental health	$168.9	$1,970	2.5
Physical disability	$144.5	$1,647	2.3
Cancer	$59.4	$2,609	3.0
Total conditions	**$1,089.8**	**$2,004**	**2.5**

Source: Deloitte Access Economics (2026).

Coverage of EPs

According to ESSA data, there are 9,870 EPs in Australia, of which 8,687 (88%) are currently working in clinical roles. EP services are delivered across all states and territories, with the largest concentrations in New South Wales (3,953 EPs) and Queensland (2,842 EPs).

EPs collectively service approximately 940,000 patients annually, with an average of five unique clients per day per EP. The caseload varies by condition. Musculoskeletal conditions represent the largest share of EP practice by volume, accounting for over 2.5 million sessions annually and an estimated 250,000 unique patients. Physical disability and mental health also represent significant caseloads, each exceeding 85,000 unique patients per year. Pulmonary conditions represent the smallest in-scope condition group by patient volume, reflecting the more specialised referral pathway for pulmonary rehabilitation.

Patient age distribution skews toward working-age adults (52%, aged 18 to 64) and older adults (38%, aged 65 and over). Children and young people (aged under 18) account for approximately 10% of the patient caseload.

Collectively the in-scope conditions account for approximately 46% of all patients who see an EP each year.

Table 4.2: Summary of economic results by condition group (over three-year period).

Condition group	Annual sessions	Total unique patients
Cardiovascular	788,784	78,878
Pulmonary	115,776	11,578
Musculoskeletal	2,571,168	257,117
Mental health	857,280	85,728
Physical disability	877,584	87,758
Cancer	227,568	22,757
Total in-scope*	5,438,160	543,816
Total all treated	9,391,284	939,128

Source: Deloitte Access Economics (2026).

*Total in-scope conditions reflect the six condition groups modelled in this analysis. Total all conditions treated reflects all EP service delivery across the full scope of EP practice. Condition groups are not mutually exclusive.

Economic results

The economic analysis results by condition group are presented in Table 4.1 above. Across the six condition groups modelled, **the net economic benefit is calculated at $1.089 billion or $2,004 per treated patient, with a combined BCR of 2.5**. By condition, this ranges from $21 million for pulmonary disease through to $543 million for musculoskeletal conditions. Benefits per patient range from $1,647 to $2,608. The BCR ranges from 2.3 – 3.0 across conditions, reflecting variation in EP treated population cohort, condition severity and impact on productivity measures.

Health system savings

EP intervention reduces the frequency with which patients access acute and primary health services, generating direct savings to the health system, most commonly through avoided admissions, ED presentations and primary care visits.

For each condition group, a typical rate of health service use in the counterfactual population was identified, and an EP impact factor was applied to derive avoided service events. These services are valued at unit costs consistent with Independent Health and Aged Care Pricing Authority (IHACPA) national datasets.

Table 4.3 outlines the key avoided health system savings and capacity features by condition.

Table 4.3: Summary of health system savings by condition group (over three-year period).

Condition group	Avoided hospitalisations	Avoided ED presentations	Avoided specialist	Avoided GP	Health system saving ($M)
Cardiovascular	5,330	3,988	7,038	81,051	$176m
Pulmonary	1,209	1,547	1,535	11,897	$22m
Musculoskeletal	27,285	17,408	47,650	686,180	$551m
Mental health	295	2,419	294,578	90,044	$40m
Physical disability	16,864	8,197	27,372	39,918	$91m
Cancer	9,353	5,060	13,165	23,384	$58m
Total conditions	**60,335**	**38,618**	**391,338**	**932,474**	**$940m**

Source: Deloitte Access Economics (2026).

*Mental health avoided specialist includes both mental health services and specialist outpatient services avoided via EP intervention.

Health service capacity gains

Beyond the direct financial saving represented within the BCR, EP interventions also generate meaningful capacity relief across the hospital and acute sector. Indicative capacity gains vary significantly across conditions, reflecting differences in acuity profile and condition-specific service utilisation patterns. For physical conditions, avoided health service events over three-years translate to meaningful health system capacity gains:

- **Avoided hospital admissions:** 60,335 across all quantified condition groups.
- **Avoided surgical events:** 12,599 surgeries avoided across the modelled conditions.
- **Avoided hospital bed-days:** 413,009 equivalent to 1,132 beds freed.
- **Avoided ED hours:** 146,748 hours representing meaningful relief on ED demand.

In addition to these quantified benefits, there are additional health system savings that may be realised by the use of an EP. These include:

- EP-driven improvements in functional capacity may **delay or prevent entry to residential or community aged care**, particularly for older patients with musculoskeletal, cardiovascular and disability conditions. These savings are not quantified.
- **Lower use of pharmaceuticals** (e.g. analgesics, antihypertensives, statins and antidepressants) is a likely outcome of improved chronic disease management through EP. PBS savings are not included in this analysis.
- Fewer admissions and specialist visits may **reduce travel costs for patients' health**.
- **Reduced LOS and acuity of hospital admissions.** Where EP improves a patient's functional status prior to an acute event, the resulting admission is likely to be shorter and less intensive.

Productivity benefits

EP intervention supports workforce participation and productivity across multiple pathways. By reducing the frequency and severity of acute health events, EP reduces the number of days patients are absent from work and the extent to which their conditions limit their capacity to perform at full productivity while present.

Across all conditions, productivity gains are estimated to range from $17 million (pulmonary) to $404 million (musculoskeletal) per annum, with the majority of this benefit driven by a reduction in absenteeism (17%), followed by informal carer burden (14%) and presenteeism (69%).

Table 4.4: Summary of productivity benefits by condition group (over three-year period).

Condition	Productivity gains ($M)	Productivity gains per patient	Absenteeism	Presenteeism	Informal carer burden
Cardiovascular	$104	$1,317	8%	84%	7%
Pulmonary	$17	$1,467	17%	76%	8%
Musculoskeletal	$404	$1,571	18%	73%	9%
Mental health	$247	$2,876	11%	88%	0%
Physical disability	$170	$1,933	10%	40%	50%
Cancer	$39	$1,703	34%	54%	12%
Total	**$980**	**$1,802**	**17%**	**69%**	**14%**

Source: Deloitte Access Economics (2026).

WorkCover claims and return to work

The productivity estimates above are calculated on the basis of condition-specific absenteeism rates applied to the working-age EP-treated population. However, a potential benefit of an EP to productivity is in the WorkCover setting.

Safe Work Australia reports approximately 12.9 working weeks off work per musculoskeletal claim, at a median cost of $26,700 per claim. EP interventions (particularly musculoskeletal and mental health conditions) have the capacity to reduce the incidence of WorkCover claims and the duration of those that do occur. This pathway is not fully captured in the model.

In addition to the productivity impacts estimated within the economic analysis, there are several additional benefits which are not captured. These include:

- Where improved patient function **reduces reliance on paid carers**, EP interventions may reduce formal care costs borne by families, government and other funders. This is particularly relevant for people with physical disability and mental health conditions.
- Improved functional capacity through EP intervention may **reduce the need for NDIS-funded daily living support hours** for individuals with physical or psychosocial disability.
- For work-related injuries and conditions, EP intervention may support **faster functional recovery and return to work**, potentially reducing the duration and/or cost of WorkCover claims, as outlined above.

Overall, avoided hospitalisations, reduced service use, and improved workforce participation due to EP intervention may help preserve health system capacity, supporting people to remain engaged in work and daily activities. These unquantified benefits may inform community-level service planning for populations living with chronic and complex conditions.

Wellbeing benefits

Chronic health conditions impose a significant and sustained burden on the quality of life of affected individuals. This includes reducing a patient's ability to work, capacity to work, social participation and engage in activities that contribute to wellbeing. EP interventions have the potential to address this burden both directly and indirectly through improvements in physical functioning, symptom management, psychological wellbeing and overall improved independence.

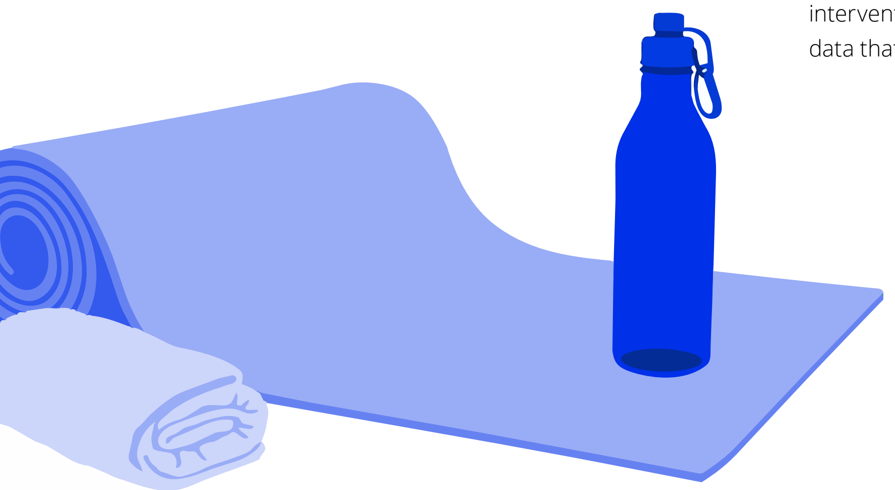
The analysis quantifies these gains in QALYs across a three-year time horizon, using a two-cohort approach that distinguishes between the higher utility gains experienced by patients with acute presentations and the more conservative gains estimated for the broader community-based EP-treated population. Across the six condition groups, QALY gains range from 223 pulmonary disease (reflecting the smaller treated cohort) to 9,207 for musculoskeletal conditions. The total QALYs gained over three years is 18,072. While not included for the purpose of this analysis, if monetised using VSLY estimates, this would equate to $4.6 billion across a three-year period.[62]

Table 4.5: Summary of wellbeing benefits by condition group (over three-year period).

Condition	Total QALY Gain
Cardiovascular	3,887
Pulmonary	223
Musculoskeletal	9,207
Mental health	2,572
Physical disability	2,027
Cancer	155
Total conditions	**18,072**

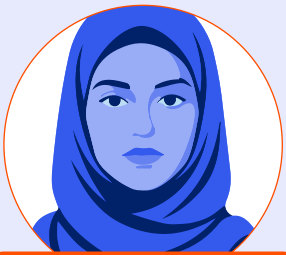
Source: Deloitte Access Economics (2026).

There are additional wellbeing benefits which are intangible, or not quantified, within the context of this economic analysis. They include factors such as psychological wellbeing, caring capacity, independence performing activities of daily living, prevention of co-morbid conditions, and increased social and community engagement. This list is not exhaustive – it provides an example of the wide-reaching impact EP interventions can have on an individual's health and general wellbeing. The outcomes of selected case studies have been included below, to articulate the value of EP interventions beyond what can be quantified through the available data that informs this report.



Musculoskeletal conditions
(e.g. osteoarthritis, osteoporosis, fracture)

CASE STUDY



Georgia
26 year old female

The program supported a transition from supervised exercise with her EP to self-managed sessions. At discharge, she demonstrated clinically significant reductions in pain, improved range of movement, and increased strength and functional capacity. Georgia was able to return to full-time nursing work and avoided costly lumbar fusion surgery.

Mental health conditions
(e.g. depression, anxiety)

CASE STUDY

Marcus
32 year old male

At discharge, Marcus demonstrated improved aerobic fitness, muscular strength, sleep quality, energy levels and confidence exercising independently. He also reported reduced avoidance of community environments, improved daily routine, and greater social participation. Exercise was not positioned as a replacement for trauma-focused care, but became a practical tool to support recovery, self-management and reintegration into civilian life.

Cancer
(e.g. ovarian, lung, breast)

CASE STUDY

Belinda
44 year old female

Over time, Belinda demonstrated improvement in fatigue, physical functioning, strength and exercise tolerance, alongside improved mood, sleep and confidence with daily activity. Following completion of active treatment, Belinda continued with a home exercise program and intermittent supervised sessions with her EP as part of survivorship care, supporting ongoing recovery, quality of life and self-management.

Source: Deloitte Access Economics & ESSA Project Advisory Group (2026).

Expanding access to EPs

Current EP service delivery represents a small fraction of the eligible population across the six condition groups. The following scenarios estimate the marginal economic benefit of incrementally expanding EP access. Given the non-mutually exclusive nature of condition groups, scenarios are expressed in absolute terms per percentage point increase in utilisation, per additional EP, and per 1,000 additional patients rather than as a share of a total population.

The future opportunities section (chapter 5) discusses the potential mechanisms available to achieve these benefits.

Per 10% increase in EP utilisation

+$109 million

total net economic benefit

Per additional EP in workforce

+$476,654

average economic contribution of one additional EP per annum

Based on average caseload across all condition groups (from ESSA headcount data)

Per 1,000 new patients treated

$2.0 million

total net economic benefit

5

Valuing the contribution of Exercise Physiologists in Australia:
An economic perspective

Conclusions and future opportunities

This section presents future opportunities for increase EP access.

Conclusion

This report demonstrates that EPs deliver measurable economic and wellbeing value in disease prevention, rehabilitation, injury and chronic condition management pathways. Across the six condition groups in scope for economic analysis, EP services were estimated to generate a net economic benefit of $1.09 billion over a three-year period. This is equivalent to $2,004 per patient, with an average BCR of 2.5. These benefits accrue across the health system and broader economy, including through avoided hospitalisation and ED presentation, reduced primary care costs, improved workforce participation, reduced productivity losses, and increased QALYs.

The estimated benefits are likely to be conservative with regard to the total EP impact in Australia. The economic analysis captures six condition groups, representing approximately 46% of current EP service delivery, and does not quantify a range of potential benefits which are difficult to fully monetise, including improved confidence, independence, mobility, and community participation.

The analysis suggests that EP services deliver value beyond the direct cost of care, with benefits extending across the health system, the economy and patient wellbeing. The estimated reductions in hospital admissions (60,355), avoided ED hours (146,748) and avoided hospital bed-days (413,009) across all quantified condition groups point to a potential capacity benefit for the health system, while improvements in function, confidence, independence and quality of life highlight the practical value for patients and carers.

Current EP service delivery represents a small fraction of the eligible population across the six condition groups. The analysis demonstrates that every 1,000 additional patients treated by EPs yields an additional economic benefit of $2.0 million.

These findings highlight an opportunity to strengthen the role of EPs within the Australian health system. While EPs are already delivering measurable value, access remains limited relative to population need. Expanding access through stronger referral pathways, sustainable funding arrangements, integration into primary care settings and improved evidence translation could increase the reach and impact of EP services for people living with, or at risk of, chronic and complex health conditions.

Future opportunities

This report highlights the significant clinical, economic, and societal value of investment in EP services in Australia. The findings demonstrate opportunities to strengthen the role of EPs across prevention, rehabilitation, chronic condition management, and functional recovery pathways. Current EP service delivery represents only a small proportion of the eligible population with less than 5% of the prevalent population accessing EP services within the condition groups examined in this analysis, indicating substantial unmet need and opportunity to expand access to exercise physiology services. Expanding access to EP interventions has the potential to improve health outcomes, reduce avoidable healthcare utilisation, and support broader workforce and community participation outcomes.

The future opportunities outlined below represent areas where greater integration, investment, and awareness of EP services may contribute to the expansion of the access. These opportunities will require careful planning, implementation, and evaluation to ensure they are delivered effectively and equitably.

Integrate EPs into end-to-end care across primary, secondary and community health settings to support prevention, early intervention, rehabilitation and long-term management

Expanding the role of EPs in preventative health and early intervention pathways could support earlier identification and management of lifestyle-related risk factors, reducing progression to more complex and costly health conditions. There may be opportunities to strengthen the integration of EPs within primary, secondary and community health settings, enabling more proactive and coordinated models of care. Embedding EPs more consistently within multidisciplinary care models could strengthen referral pathways, improve continuity of care, and support more coordinated management of chronic conditions, injuries, and functional impairments. This could also be achieved through earlier referral pathways for individuals at risk of developing chronic disease, including those with obesity, pre-diabetes, cardiovascular risk factors, reduced mobility, or declining physical function to support more proactive and preventative models of care.

Integrate EPs within aged care more broadly to support healthy aging, self-management, and community participation

Strengthening the role of EPs within aged care settings may support healthy ageing and the management of chronic conditions in older populations. As Australia's population ages and the prevalence of chronic disease, frailty, and functional decline increases, demand for services that support mobility, strength, independence, and quality of life is likely to grow. Greater integration of EPs into aged care and community-based support services may help promote healthy ageing through exercise interventions focused on improving balance, physical function, and reduce falls., Increased self-management and independnce can also improve community participation as EP-delivered support builds individual's confidence and functional capacity, enabling them to engage more independently in social, recreational and everyday community activities. This also reflects that adults aged 65+ comprise approximately 38% of patients typically seen by EPs.

Expanding the role of EPs within occupational rehabilitation and return-to-work pathways to ensure benefits of early intervention are realised

There may be opportunities to further strengthen the role of EPs within occupational rehabilitation and return-to-work pathways. Exercise-based rehabilitation can support recovery following injury or illness, improve functional capacity, and assist individuals to safely return to work and daily activities. Early intervention is a well-established principle within occupational rehabilitation, with evidence indicating that timely access to rehabilitation improves return-to-work outcomes and reduces impairment for workers with musculoskeletal and mental health conditions.[63] Greater integration of EPs within workplace health programs, workers' compensation schemes, and insurer-funded rehabilitation pathways may support earlier intervention, more coordinated recovery and rehabilitation processes. The economic analysis in this report estimated productivity costs account for more than half of the benefits derived by EPs, further emphasising the importance of EPs in these pathways.

Invest in research and evidence translation regarding the clinical and financial efficacy of exercise physiology in the broader community, public health system, and compensable schemes

Continued investment in research, longitudinal data collection, and evidence translation could strengthen understanding of the long-term impacts of EP interventions and support more consistent outcome measurements across settings and populations. During this analysis, evidence on the sustained long-term effects of exercise physiology interventions was more limited than evidence relating to short- and medium-term outcomes. While early findings demonstrate positive impacts across a range of health and functional outcomes, there remains an opportunity to strengthen the evidence base relating to the persistence of these benefits over time.

Importantly, many EP interventions are designed not only to improve immediate health outcomes, but also to support long-term behavioural change, self-management, and sustained engagement in physical activity. These behavioural and lifestyle changes contribute to enduring health benefits that extend well beyond the intervention period.

Increase awareness of exercise physiology among policymakers, employers and broader community

Increasing awareness of the role and value of EPs among policymakers, the healthcare sector, employers, and the broader community could strengthen referral pathways, improve utilisation of services, and support greater integration of exercise physiology within health system planning and policy development. Despite the broad clinical application of exercise physiology, awareness of the scope of EP practice and the evidence supporting exercise-based interventions may remain variable across parts of the health system and wider community. This is also reflected in the relatively low uptake of EP services estimated within this analysis, suggesting there may be unmet need and opportunities to improve access and referral pathways.

This may also extend to strengthening education, advocacy, and evidence translation activities targeting healthcare providers, employers, insurers, aged care providers, and community organisations.

Valuing the contribution of Exercise Physiologists in Australia:
An economic perspective

Appendices

Appendix A: Technical Appendix

This appendix provides the complete technical methodology, data sources, input tables and assumptions underlying the economic analysis in Chapter 3. It is structured to mirror the benefit stream sequence in the main body and provides additional detail suitable for technical peer review.

A1: Model structure and framework

Time horizon and benefits realisation

The base analysis applies a three-year time horizon supporting evidence that EPs can build patient capacity for sustained independent exercise beyond periods of direct engagement. The following assumptions were applied:

- In the first year, patients receive 8 to 10 EP-supervised sessions.
- In the second year, a reduced program of approximately 4 sessions supports maintenance and self-management.
- In the third year, patients are assumed to maintain exercise behaviour independently, without EP sessions.

The benefits are applied to full extent in the first year, and diminish across the following two years, reflecting partial maintenance and behavioural changes. EP service costs are only incurred in the first two years. This produces a net benefit that is more representative of the potential benefits attributed to the EP intervention rather than a single year snapshot.

The assumption that individuals maintain exercise behaviour independently following the active intervention period represents a simplifying modelling assumption. While some patients may successfully transition to self-directed exercise and self-management, others may require ongoing clinical review, exercise progression and behavioural support from an EP to sustain benefits over time. The analysis therefore represents one potential pathway to benefit realisation and may not capture the full costs or benefits associated with sustained EP engagement.

Table A1.1: Overview of time horizon and benefits realisation.

Parameter	Year 1	Year 2	Year 3	Notes
EP sessions per patient	8 to 10	4	0	-
Benefit scaling factor	100%	50%	25%	-
Health system savings	Full	50% of Year 1	25% of Year 1	Proportional to benefit scaling
Productivity gains	Full	50% of Year 1	25% of Year 1	Proportional to benefit scaling
Wellbeing gains	Full	50% of Year 1	25% of Year 1	Proportional to benefit scaling

Source: Deloitte Access Economics (2026).

Identifying the EP treated population

The EP-treated population is estimated from the ESSA Headcount Survey (2025), which reports EP headcount by condition group and estimated number of weekly patients seen. The number of unique patients seen per EP is estimated by dividing the total patients seen per week by the total number of EPs, then annualising. This approach is necessary because individual patient records are not available from the census. the workforce data records EP headcount and session volumes; not unique patient counts directly.

Table A1.2: EP utilisation and cost estimations.

Condition	Annual sessions	Session frequency per patient	Total unique patients (annual)	Total EPs by headcount	Unit cost per session	Total EP cost per patient
Cardiovascular	788,787	10	78,878	3,518	$100	$1,000
Pulmonary	115,776	10	11,578	784	$100	$1,000
Musculoskeletal	2,571,168	10	257,117	6,330	$100	$1,000
Mental Health	857,280	10	85,728	3,526	$100	$1,000
Physical disability	877,584	10	87,758	3,693	$100	$1,000
Cancer	227,568	10	22,757	1,352	$100	$1,000
Source:	ESSA headcount survey	Informed assumption during workshops		Derived	Blended average	Derived

Source: Deloitte Access Economics (2026).

A2: EP impact factor derivation

A key input within all three benefit streams outlined in this analysis is the EP impact factor, which is defined as the estimate improvement in health outcomes and service utilisation attributed to EP intervention. The EP impact factor is the proportional improvement in a health or economic outcome attributable to EP intervention, relative to standard care. It is derived from a detailed literature scan of all EP and structured physical intervention across specific conditions related to the six condition groups.

The summary of the literature scan is outlined in Table A2.1, and identified considerable variability across study designs, measured outcomes and types of interventions across the available evidence. Some studies were conducted on more acute clinical populations while others targeted community-based prevalent groups, and the type and intensity of exercise varied considerably. To account for this, condition specific EP impact factors were aggregated into a sole impact factor, that accounted for each condition and EP treated population by condition. **An EP impact factor of 39% was applied in this analysis.**

The available evidence base used to inform the EP impact factor was subject to several limitations. Ideally, the analysis would have drawn on condition-specific estimates of the isolated impact of EP intervention on health outcomes, service utilisation and care needs. However, the available literature was not EP-specific and instead examines exercise-based interventions more broadly, including those delivered by other medical or allied health professionals, or as part of a multi-disciplinary care team. Additionally, studies generally focussed on specific sub-conditions or patient cohorts, rather than the broader condition groups in-scope for this project. As such, it was necessary to apply assumptions from narrower clinical populations to broader condition categories.

Given the substantial variation in effect sizes and availability of data across the literature, individual study estimates were not applied directly. Instead, condition-level effect sizes were combined into a single EP impact factor, derived as a weighted average based on the relative volume of patients within each condition group. This methodology was selected to moderate the effect size of these highly variable and potentially non-representative estimates due to the literature being limited to exercise-only interventions, allowing for a more pragmatic EP impact factor in economic analysis. In some conditions, particularly mental health, the literature primarily reported impacts on symptom severity rather than direct reductions in hospitalisation or health service use. The economic analysis therefore applied an additional assumption that improvements in mental health symptoms would translate into reduced care-seeking. While this is plausible, it is a limitation and should be interpreted as an indicative assumption rather than a directly observed effect.

Table A2.1: Summary of literature scan informing EP impact factor.

Condition	Weighting	Category	Study design	Impact	Source
Cardiovascular	14%	Hospital admission	Meta analysis	23%	Dibben et al. 2023[64]
			Meta analysis	42%	Dibben et al. 2021[65]
			Prospective cohort	15%	Thomas et al. 2019[66]
Pulmonary	2%	ED presentation	Quasi-experimental	43%	Toubes et al. 2023[67]
		Hospital admission	Quasi-experimental	48%	Toubes et al. 2023[68]
			Systematic review	44%	Menses-Echavez et al. 2023[69]
			Meta analysis	32%	Lu et al. 2023[70]
			Systematic review	35%	Moore et al. 2026[71]
			Observational cohort	46%	Cecins et al. 2008[72]
Musculoskeletal	48%	Care avoidance	Randomised control	43%	Pocovi et al. 2024[73]
		Hospital admission	Meta analysis	27%	Sherrington et al. 2019[74]
			Parallel RCTs	68%	Skout et al. 2024[75]
			Meta analysis	37%	El-Khoury et al. 2013[76]
Mental health	15%	Mental Health Symptom Inventory	Systematic review	48%	Singh et al. 2023[77]
			Meta analysis	66%	Gordon et al. 2018[78]
			Meta analysis	51%	Kim et al. 2023[79]
Physical disability	17%	Hospital admission	Prospective cohort	8%	Kubiak & Sklar 2022[80]
			Longitudinal cohort	9%	Kannarkat et al. 2022[81]
		Morbidity	Longitudinal cohort	23%	Izquierdo-Gomez et al. 2024[82]
			Randomised control	24%	Gill et al. 2017[83]
Cancer	4%	Hospital admission	Systematic review	8%	Mizrahi et al. 2024[84]
			Systematic review	50%	Steffens et al. 2025[85]
			Randomised control	80%	Mijwel et al. 2020[86]
			Longitudinal cohort	30%	Allen et al. 2025[87]
			Average EP impact factor	**39%**	

Source: Deloitte Access Economics (2026).

A3: Health system savings – detailed methodology

Calculating health service gains

Avoided health system cost =
(National service volume ÷ Prevalent population) × EP impact factor × Unit cost per service × Total EP-treated patient

Service activity and unit costs

Service utilisation rates are derived from national administrative datasets by dividing total condition-specific service volumes by the estimated prevalent population. These per-patient rates are applied to the EP-treated cohort to estimate counterfactual events (without EP), then adjusted by the EP impact factor to estimate intervention-scenario events.

- **Admitted care:** Australian Institute of Health and Wellbeing (AIHW)/ IHACPA Admitted Patient Care 2022-23 total admissions divided by prevalent population for each condition (2022-23)
- **ED presentations:** AIHW/IHACPA National Emergency Department Care (2022-23)
- **Specialist outpatients:** AIHW/IHACPA National Non-Admitted Patient (2022-23)
- **GP visits:** Based on AIHW assume half of all GP appts in a year are attributable to condition. Unit costs based on item 23 and 36, GP visit standard and long. $44-$83.[88, 89]
- **Psychology:** MBS item 80110 (2024-25) - $98.9[90]

Table A3.1: Baseline service events for counterfactual population.

Condition	Condition prevalence	Health service category	Total annual service count	Rate of service	Total services (in EP treated population)
Cardiovascular	4,481,100	Hospital admissions	449,361	10%	6,122
		ED presentations	336,200	7.5%	4,580
		GP consultations	NA	153%	93,094
		Specialist outpatient	593,409	13%	8,084
Pulmonary	3,363,300	Hospital admissions	521,269	15%	1,384
		ED presentations	666,765	19.8%	1,770
		GP consultations	NA	153%	13,615
		Specialist outpatient	661,886	19.7%	1,757
Musculoskeletal	4,730,700	Hospital admissions	745,050	16%	32,158
		ED presentations	475,357	10%	20,518
		GP consultations	NA	153%	311,388
		Specialist outpatient	1,301,148	28%	56,161
Mental health	7,407,600	Hospital admissions	37,803	0.50%	334
		ED presentations	310,162	4%	2,744
		GP consultations	NA	156%	102,176
		Mental health services	NA	505%	331,116
		Specialist outpatient	355,990	5%	3,150
Physical disability	3,094,800	Hospital admissions	882,600	29%	20,602
		ED presentations	429,000	14%	10,014
		GP consultations	2,089,200	68%	48,767
		Specialist outpatient	1,432,600	46%	33,440
Cancer	571,600	Hospital admissions	348,677	61%	10,744
		ED presentations	NA	33%	5,813
		GP consultations	NA	153%	26,861
		Specialist outpatient	490,759	86%	15,123

Source: Deloitte Access Economics (2026). Analysis of IHACPA Admitted, Emergency Department, Non-Admitted and Medicare data.

*Condition prevalence data is based on ABS - National Health Survey (2022) with the exception of physical disability which is derived from ABS - Disability Ageing and Carers Australia (2022) - assuming severe, moderate and mild activity limitation.

Classification mapping per condition group

Each condition is mapped to the most representative Australian Refined Diagnosis Related Groups (AR-DRG), International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD 10-AM) or Tier 2 classification for admitted episodes, ED presentations and specialist outpatient appointments respectively. Where a condition spans multiple classifications, an average cost is calculated from either the total grouping or total datasets.

Table A3.2: Classification mapping by condition group.

	Admitted episode			ED presentation			Specialist outpatients		
Condition	**DRG group**	**Description**	**Unit $***	**ICD-10-AM**		**Unit $***	**Tier 2**	**Tier 2 + description**	**Unit $***
Cardiovascular	F40A to F75Z	Cardiac procedures and AMI management	$31,126	I00–I99	Diseases of the circulatory system	$1,134	20.22 20.23 40.21	Cardiology Cardiothoracic Cardiac Rehabilitation	$102
Pulmonary	E62A to E65B	Respiratory infections and COPD exacerbations	$16,041	J00–J99	Diseases of the respiratory system	$1,259	20.19 40.40 40.60	Respiratory Respiratory Pulmonary Rehabilitation	$98
Musculoskeletal	I03A to I69Z	Musculoskeletal procedures and joint replacements	$18,755	M00–99	Diseases of the musculoskeletal system and connective tissue	$1,077	20.29 20.31 40.56	Orthopaedics Spinal Falls Prevention	$89
Mental health	U40A to U67Z	Admitted mental health care episodes	$11,074	F00-F99	Mental and behavioural disorders	$910	20.45 20.50 40.29	Psychiatry Psychogeriatric Psychology	$99
Physical disability	B02A to B80Z	Neurological and rehabilitation episodes	$21,407	G00 – G99, M00-M99, S00-T98	Injury, poisoning and certain other consequences of external causes	$913	20.47 40.12	Rehabilitation Rehabilitation	$115
Cancer	R02A to R63Z	Chemotherapy and surgical oncology	$5,351	C00 -D48	Neoplasms	$1,063	10.11 20.42 40.52	Chemotherapy - Treatment Medical Oncology (Consultation) Oncology	$112

Source: Deloitte Access Economics (2026). Analysis of IHACPA Admitted, Emergency Department, Non-Admitted activity and costing datasets.
*Costs are presented as direct costs incurred by the hospital only
^when mapping is unclear, unit cost is calculated as the overall average sample cost.

A4: Productivity gains

Calculating productivity gains

Total avoided productivity cost =
Avoided absenteeism + Avoided presenteeism + Avoided carer burden

Avoided absenteeism =
(EP-treated patients × Employment rate × Average days lost per year × Daily wage rate) × EP impact factor

Avoided presenteeism =
(Working-age patients × Return to Work rate × Annual salary × Presenteeism loss rate) × EP impact factor

Avoided carer burden =
Avoided events × Carer prevalence × LOS × 2 recovery loading) × Carer hours per day × Shadow wage rate

Absenteeism

Absenteeism refers to the total number of days a worker is absent from paid employment due to ongoing health conditions. In this analysis, it captures the economic cost of working days as a direct result of a condition-specific health event such as a hospitalisation or ED presentation, as well as estimated time off work for pain or other related factors that do not require a health service event.

Absenteeism is estimated by identifying the working-age proportion of each EP-treated cohort using average employment rates derived from the ABS labour and accounted for age distribution from EP patient data provided by ESSA. This equated to 50% for all conditions, except for physical disability which was derived from ABS Survey of Disability, Ageing and Carers (SDAC) (Table 10). For each condition, the average number of working days missed per patient is drawn from a variety of international literature. This is multiplied by the daily wage rate to produce a counterfactual absenteeism cost per working patient. The EP impact factor is then applied to estimate the proportion of those working days recovered through EP intervention. The avoided absenteeism cost is the product of recovered days, the working-age cohort and the daily wage rate.

Presenteeism

Presenteeism refers to the loss of productivity that occurs when a worker attends work but is not fully functioning at capacity due to being impacted by a health condition. This measure assists to capture the hidden cost of productivity of impaired performance. Return-to-work rates by injury type are sourced from the Safe Work Australia National Return to Work Survey 2025, giving 88.9% for physical injury conditions and 37.2% for psychological injury conditions.[91] For the cohort that has returned to work, a presenteeism loss rate is applied for a period of 12 months post-return. The loss rates 6% of normal work output for physical conditions and 16% for mental health.[92]

Table A4.1: Overview of absenteeism assumptions and presenteeism loss rate by condition.

Condition	RTW rate	Cohort type	Presenteeism loss rate	Source
Cardiovascular	88.90%	Physical injury	6% for 12 months	Safe Work Australia Safer Healthier Wealthier, 2022
Pulmonary	88.90%	Physical injury	6% for 12 months	Safe Work Australia Safer Healthier Wealthier, 2022
Musculoskeletal	88.90%	Physical injury	6% for 12 months	Safe Work Australia Safer Healthier Wealthier, 2022
Mental health	37.20%	Psychological injury	16% for 12 months	Safe Work Australia Safer Healthier Wealthier, 2022
Physical disability	88.9%	Physical, employer reported	6% for 12 months	Safe Work Australia NRTW Survey, 2025
Cancer	88.90%	Physical injury	6% for 12 months	Safe Work Australia Safer Healthier Wealthier, 2022

Source: Deloitte Access Economics (2026).

Informal carer burden

Informal carer burden measures the opportunity cost of unpaid care provided by family members or friends during and after a condition-related hospitalisation or ED event. Informal career burden is estimated from hospitalised acute cohort for each condition – hospitalised and ED presentations. The methodology uses the average LOS associated with each hospitalisation and ED presentation avoided, then applies a loading factor of 2 to account for care required for recovery and discharge support. The hours of informal carer burden are valued at an estimated wage rate of $47.5.[93] The EP impact factor is applied to the avoided event count, which already embeds the treatment effect on admission rates.

Table A4.2 summarises the key productivity assumption parameters used in this analysis

Table A4.2: Key productivity assumptions.

Parameter	Value	Source
Weekly wage	$2051.1	ABS Average Weekly Earnings, November 2025
Annual salary (full-time equivalent)	$85,326	Derived from weekly earnings, assuming an 80% FT, 20% part time split.
Employment rate	50%	ABS Labour Force Survey (ABS employment) 16-64 unemployment rate and ESSA headcount data.
Employment rate (disability)	34%	ABS SDAC (Table 10)
Carer rate (physical disability)	79%	ABS SDAC (Table 9 and 13)
Carer shadow wage	$47.50/hr	ABS AWE 2024 ÷ 40 working hours (opportunity cost)
Return to work rate (physical injury)	88.9%	Safe Work Australia NRTW Survey, 2025
Return to work rate (psychological injury)	37.2%	Safe Work Australia NRTW Survey, 2025
Presenteeism rate (physical conditions)	6% productivity decline	Safe Work Australia Safer Healthier Wealthier (Deloitte analysis)
Presenteeism rate (mental health)	16% productivity decline	Safe Work Australia Safer Healthier Wealthier (Deloitte analysis)
Presenteeism duration	12 months post-RTW	Modelled assumption based on chronic conditions

Source: Deloitte Access Economics (2026).

A5: Wellbeing gains

Changes in wellbeing gains were estimated using the difference between chronic disease utility norms from Saarni et al. (2006) relative to the general population utility value. The EP impact factor was multiplied by this difference to estimate the improvement in utility scores following an EP intervention.

Table A5.1 sets out the EQ-5D utility scores and QALY gain assumptions applied by condition group, together with the primary mapping source. The utility gain in each case represents the central estimate after applying the blended effect size to the counterfactual utility score.

Table A5.1: Utility gain following EP intervention.

Condition	Counterfactual utility	General population utility	EP Utility gain
Cardiovascular	0.69	0.82	0.05
Pulmonary	0.74	0.82	0.03
Musculoskeletal	0.72	0.82	0.04
Mental health	0.73	0.82	0.03
Physical disability	0.755	0.82	0.02
Cancer	0.74	0.82	0.02

Source: Deloitte Access Economics estimates based on Saarni et al. (2006).

Appendix B: Sensitivity analysis

B1: Sensitivity analysis

The sensitivity analysis tests the impact of changes to parameters within the economic analysis across two pillars:

- **EP impact factor:** the weighted average of clinical evidence applied across conditions and service types, and the primary driver of model outputs.
- **EP intervention cost:** the per-session cost associated with delivering an EP service.

For the EP impact factor, a lower bound of 25% and an upper bound of 50% were applied to understand changes in total benefit, net economic benefit, and BCR, while total cost of delivering EP interventions remains consistent. In the low scenario, net economic benefit is reduced to $457 million, with a BCR of 1.6 returned. In the high scenario, net economic benefit increases to $1.6 billion, returning a BCR of 3.3.

When moderating the EP intervention cost, the per-session cost of $100 is reduced by 25% for the low scenario and increased by 25% for the high scenario. The low scenario returned a cost of almost $537 million with BCR of 3.4, while the high scenario returned costs of $893 million and a BCR of 2.0. Table B1.1 presents the outputs of the sensitivity analysis.

Table B1.1: EP impact factor and intervention cost sensitivity analysis.

Pillar	Parameter	Low scenario	Central	High scenario
EP impact factor	EP impact factor	25%	39%	50%
	Total benefits	$1,171,432,397	$1,804,140,557	$2,342,864,794
	Total costs	$714,373,530	$714,373,530	$714,373,530
	Net economic benefit	$457,058,867	$1,089,767,027	$1,628,491,264
	BCR	1.6	2.5	3.3
EP intervention cost	Session rate	-25%	$100	25%
	Total benefits	$1,804,140,557	$1,804,140,557	$1,804,140,557
	Total costs	$535,780,148	$714,373,530	$892,966,912
	Net economic benefit	$1,268,360,409	$1,089,767,027	$911,173,644
	BCR	3.4	2.5	2.0

Source: Deloitte Access Economics (2026).

Interpretation of intervention cost sensitivity

The cost sensitivity analysis is intended solely to test the responsiveness of model outputs to changes in the assumed cost-per-session input. This reflects that EP services can be delivered across different settings, session length and case complexity. The scenarios presented should not be interpreted as a recommendation regarding pricing, reimbursement, funding levels or sustainable remuneration for EP services.

The analysis assumes that the same patient outcomes and benefits are achieved regardless of the intervention cost applied. In practice, changes to funding arrangements, service intensity, consultation duration, workforce availability or access to care may influence both service delivery and outcomes.

Furthermore, lower EP intervention costs do not necessarily imply lower system-wide costs. If funding reductions result in reduced service availability, lower treatment intensity, or greater reliance on other health professionals to support equivalent outcomes, costs may be transferred elsewhere within the health, disability or compensable care systems rather than avoided. These broader system interactions are not captured within the sensitivity analysis.

Accordingly, the low-cost scenario should be interpreted as a modelling test of a key parameter rather than evidence that lower reimbursement levels would improve value for money or represent an optimal funding approach.

References

1. Australian Institute of Health and Welfare. (2024). Chronic conditions. AIHW, Australian Government. https://www.aihw.gov.au/reports/australias-health/chronic-conditions

2. Australian Institute of Health and Welfare. (2024). Physical activity. AIHW, Australian Government. https://www.aihw.gov.au/reports/physical-activity/physical-activity

3. Australian Institute of Health and Welfare. (2023). Economics of sport and physical activity participation and injury. AIHW, Australian Government. https://www.aihw.gov.au/reports/sports-injury/economics-of-sport-and-physical-activity/contents/about

4. Australian Institute of Health and Welfare. (2025). Health system spending on disease and injury in Australia 2023–24. AIHW, Australian Government.https://www.aihw.gov.au/reports/health-welfare-expenditure/health-system-spending-disease-injury-aus-2023-24/contents/summary

5. Australian Institute of Health and Welfare. (2021). Australian Burden of Disease Study 2018: Interactive data on risk factor burden - physical inactivity. AIHW, Australian Government.https://www.aihw.gov.au/reports/burden-of-disease/abds-2018-interactive-data-risk-factors/contents/physical-inactivity

6. Keating, S. et al. (2025). Exercise prescription in the management of chronic disease falling through an evidence-practice gap: Perspectives of doctors and nurses in specialist settings. Journal of Health Services Research & Policy. 30(4), 270-281. https://pubmed.ncbi.nlm.nih.gov/40719324/

7. Dibben, G. et al. (2023). Exercise-based cardiac rehabilitation for coronary heart disease: A meta-analysis. European Heart Journal, 44(6), 452–469. https://academic.oup.com/eurheartj/article/44/6/452/7028725

8. Australian Institute of Health and Welfare. (2024). Physical activity. AIHW, Australian Government. https://www.aihw.gov.au/reports/physical-activity/physical-activity

9. Bispo, D. et al. (2024). The positive effects of physical activity on quality of life in Parkinson's disease: A systematic review. Geriatrics, 9(4), 94.https://pubmed.ncbi.nlm.nih.gov/39051258/

10. Australian Institute of Health and Welfare. (2024). Physical activity. AIHW, Australian Government. https://www.aihw.gov.au/reports/physical-activity/physical-activity

11. Booth, F. et al. (2012). Lack of exercise is a major cause of chronic diseases. Comprehensive Physiology, 2(2), 1143–1211. https://pmc.ncbi.nlm.nih.gov/articles/PMC4241367/

12. Lee, I. et al. (2012). Effect of physical inactivity on major non-communicable diseases worldwide: An analysis of burden of disease and life expectancy. The Lancet, 380(9838), 219–229. https://pmc.ncbi.nlm.nih.gov/articles/PMC3645500/

13. Australian Institute of Health and Welfare. (2021). Australian Burden of Disease Study 2018: Interactive data on risk factor burden - physical inactivity. AIHW, Australian Government. https://www.aihw.gov.au/reports/burden-of-disease/abds-2018-interactive-data-risk-factors/contents/physical-inactivity

14. Australian Institute of Health and Welfare. (2026). Injury in Australia. AIHW, Australian Government. https://www.aihw.gov.au/reports/injury/injury-in-australia/contents/about

15. Australian Bureau of Statistics. (2024). Disability, Ageing and Carers, Australia: Summary of Findings, 2022. ABS. https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release

16. Fransen, M. et al. (2015). Exercise for osteoarthritis of the knee. Cochrane Database of Systematic Reviews, 2015(1), CD004376. https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004376.pub3/full

17. Zhang, X. et al. (2021). Exercise interventions, physical function, and mobility after hip fracture: A systematic review and meta-analysis. Disability and Rehabilitation. 44(18):4986–4996. https://www.tandfonline.com/doi/abs/10.1080/09638288.2021.1924299

18. Pahor, M. et al. (2014). Effect of structured physical activity on prevention of major mobility disability in older adults: The LIFE Study randomized clinical trial. JAMA, 311(23), 2387–2396. https://pmc.ncbi.nlm.nih.gov/articles/PMC4266388/

19. Kwasnicka, D. et al. (2016). Theoretical explanations for maintenance of behaviour change: A systematic review of behaviour theories. Health Psychology Review, 10(3), 277–296. https://pmc.ncbi.nlm.nih.gov/articles/PMC4975085/

20. Olasagasti-Ibargoien, J. et al. (2023). Barriers to physical activity for women with physical disabilities: A systematic review. Journal of Functional Morphology and Kinesiology, 8(2), 82. https://pmc.ncbi.nlm.nih.gov/articles/PMC10299685/

21. Burgess, C. et al. (2024). Barriers and enablers to physical activity for individuals living with traumatic brain injury: A mixed methods systematic review. Brain Injury. 38(14): 1157–1170. https://pubmed.ncbi.nlm.nih.gov/39049550/

22. Rhodes, R. & Sui, W. (2021). Physical activity maintenance: A critical narrative review and directions for future research. Frontiers in Psychology, 12, 725671. https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2021.725671/full

23. Albert, F. et al. (2020). Functionality of Physical Activity Referral Schemes: A systematic review. Frontiers in Public Health, 8, 257. https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2020.00257/full

24. Hoffmann, T. et al. (2016). Prescribing exercise interventions for patients with chronic conditions. CMAJ, 188(7), 510–518. https://pmc.ncbi.nlm.nih.gov/articles/PMC4835280/

25. Exercise & Sports Science Australia. (2021). Accredited Exercise Physiologist Scope of Practice. ESSA. https://www.essa.org.au/Common/Uploaded%20files/Standards/AEP%20Scope%20of%20Practice.pdf

26. Deloitte Access Economics. (2015). Value of Accredited Exercise Physiologists in Australia. Deloitte. https://www.deloitte.com/content/dam/assets-zone1/au/en/docs/services/economics/deloitte-au-economics-value-exercise-physiologists-Australia.pdf

27. Exercise & Sports Science Australia. (n.d.). Accreditation types. ESSA. https://essa.org.au/Web/Web/Accreditation/Becoming-accredited/Accreditation-types.aspx?hkey=66bc2e8c-a9c0-41f8-92c8-2bc439f9c7bd

28. Exercise & Sports Science Australia. (2021). Accredited Exercise Physiologist Professional Standards for Accreditation. ESSA. https://www.essa.org.au/Common/Uploaded%20files/Standards/AEP%20Professional%20Standards_170921_FINAL.pdf

29. Allied Health Professions Australia. (n.d.). Exercise physiology. AHPA. https://www.ahpa.com.au/exercise-physiology

30. Deloitte Access Economics. (2015). Value of Accredited Exercise Physiologists in Australia. Deloitte. https://www.deloitte.com/content/dam/assets-zone1/au/en/docs/services/economics/deloitte-au-economics-value-exercise-physiologists-Australia.pdf

31. Deloitte Access Economics, Exercise & Sports Science Australia. (2026). ESSA Internal data.

32. Björkman, F. & Ekblom, Ö. (2022). Physical exercise as treatment for PTSD: A systematic review and meta-analysis. Military Medicine. 187(9-10): e1103–e1113. https://pubmed.ncbi.nlm.nih.gov/34850063/

33. Selph, S. et al. (2021). Physical activity and the health of wheelchair users: A systematic review in multiple sclerosis, cerebral palsy, and spinal cord injury. Archives of Physical Medicine and Rehabilitation. 102(12): 2464–2481. https://www.archives-pmr.org/article/S0003-9993(21)01484-2/fulltext

34. Exercise Right. (2026). ESSA. https://exerciseright.com.au/resources/

35. Department of Health and Aged Care. (2025). Medicare Benefits Schedule - Item 10953. Australian Government. https://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=10953

36. Department of Veterans' Affairs. (2025). Exercise physiologists schedule of fees: Effective 1 July 2025. Australian Government. https://www.dva.gov.au/sites/default/files/2025-07/exphysfees-1-jul-2025.pdf

37. Exercise & Sports Science Australia. (2025). NDIS Pricing Review - Exercise Physiology therapy. ESSA. https://www.essa.org.au/Web/Web/Resources/Articles/2025/ndis-pricing-review-exercise-physiology-therapy.aspx

38. WorkSafe Queensland. (2025). Exercise Physiology Table of Costs: 1 August 2025. Queensland Government. https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0036/147897/Exercise-Physiology-Table-of-Costs-1-August-2025.pdf

39. Dibben, G. et al. (2023). Exercise-based cardiac rehabilitation for coronary heart disease: A meta-analysis. European Heart Journal, 44(6), 452–469. https://academic.oup.com/eurheartj/article/44/6/452/7028725

40. Dibben, G. et al. (2021). Exercise-based cardiac rehabilitation for coronary heart disease. Cochrane Database of Systematic Reviews, 2021(11), CD001800. https://pubmed.ncbi.nlm.nih.gov/34741536/

41. Thomas, E. et al. (2019). Effect of cardiac rehabilitation on 24-month all-cause hospital readmissions: A prospective cohort study. European Journal of Cardiovascular Nursing, 18(3), 234–244. https://pubmed.ncbi.nlm.nih.gov/30547678/

42. Toubes-Navarro, M. et al. (2023). A pulmonary rehabilitation program reduces hospitalizations in chronic obstructive pulmonary disease patients: A cost-effectiveness study. Annals of Thoracic Medicine, 18(4), 190–198. https://pubmed.ncbi.nlm.nih.gov/38058789/

43. Meneses-Echavez, J. et al. (2023). Pulmonary rehabilitation for acute exacerbations of COPD: A systematic review. Respiratory Medicine, 219, 107425. https://www.sciencedirect.com/science/article/pii/S095461112300313X

44. Lu, H. et al. (2023). Effects of early pulmonary rehabilitation on hospitalized patients with acute exacerbation of chronic obstructive pulmonary disease: A systematic review and meta-analysis. International Journal of Chronic Obstructive Pulmonary Disease, 18, 907–919. https://pmc.ncbi.nlm.nih.gov/articles/PMC10198174/

45. Moore, E. et al. (2016). Pulmonary rehabilitation as a mechanism to reduce hospitalizations for acute exacerbations of COPD: A systematic review and meta-analysis. Chest, 150(4), 837–859. https://pubmed.ncbi.nlm.nih.gov/27497743/

46. Cecins, N. et al. (2008). Reduction in hospitalisation following pulmonary rehabilitation in patients with COPD. Australian Health Review, 32(3), 415–422. https://pubmed.ncbi.nlm.nih.gov/18666869/

47. Pocovi, N. et al. (2024). Effectiveness and cost-effectiveness of an individualised, progressive walking and education intervention for the prevention of low back pain recurrence in Australia: A randomised controlled trial. The Lancet, 404(10448), 134–144. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(24)00755-4/fulltext

48. Sherrington, C. et al. (2019). Exercise for preventing falls in older people living in the community. Cochrane Database of Systematic Reviews, 2019(1), CD012424. https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012424.pub2/full

49. Skou, S. et al. (2018). Total knee replacement and non-surgical treatment of knee osteoarthritis: 2-year outcome from two parallel randomized controlled trials. Osteoarthritis and Cartilage, 26(9), 1170–1180. https://www.sciencedirect.com/science/article/pii/S1063458418312214

50. El-Khoury, F. et al. (2013). The effect of fall prevention exercise programmes on fall induced injuries in community dwelling older adults: Systematic review and meta-analysis of randomised controlled trials. BMJ, 347, f6234. https://www.bmj.com/content/347/bmj.f6234

51. Singh, B. et al. (2023). Effectiveness of physical activity interventions for improving depression, anxiety and distress: An overview of systematic reviews. British Journal of Sports Medicine, 57(18), 1203–1209. https://researchnow-admin.flinders.edu.au/ws/files/70218883/Singh_Effectiveness_P2023.pdf

52. Gordon, B. et al. (2018). Association of efficacy of resistance exercise training with depressive symptoms: Meta-analysis and meta-regression analysis of randomized clinical trials. JAMA Psychiatry, 75(6), 566–576. https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2680311

53. Kim, M. et al. (2023). Effects of exercise on positive symptoms, negative symptoms, and depression in patients with schizophrenia: A systematic review and meta-analysis. International Journal of Environmental Research and Public Health, 20(4), 3719. https://www.mdpi.com/1660-4601/20/4/3719

54. Kubiak, J. & Sklar, M. (2022). Relationship of exercise and hospital readmission after spinal cord injury: A secondary analysis. American Journal of Occupational Therapy, 76(1), 7601180070. https://pubmed.ncbi.nlm.nih.gov/34962515/

55. Kannarkat, G. et al. (2022). Effect of exercise and rehabilitation therapy on risk of hospitalization in Parkinson's disease. Movement Disorders Clinical Practice, 9(4), 494–500. https://pmc.ncbi.nlm.nih.gov/articles/PMC9092731/#mdc313456-sec-0011

56. Izquierdo-Gomez, R. et al. (2024). The role of physical activity in the association between disability and mortality among US older adults: A nationwide prospective cohort study. GeroScience, 46, 3275–3285. https://pmc.ncbi.nlm.nih.gov/articles/PMC11009203/

57. Gill, T. et al. (2017). The effect of intervening hospitalizations on the benefit of structured physical activity in promoting independent mobility among community-living older persons: Secondary analysis of a randomized controlled trial. BMC Medicine, 15, 65. https://link.springer.com/article/10.1186/s12916-017-0824-6

58. Mizrahi, D. et al. (2024). Effect of exercise interventions on hospital length of stay and admissions during cancer treatment: A systematic review and meta-analysis. British Journal of Sports Medicine, 58(2), 97–109. https://bjsm.bmj.com/content/58/2/97.long

59. Steffens, D. et al. (2025). An updated systematic review and meta-analysis of unimodal prehabilitation with exercise intervention to enhance postoperative outcomes in cancer surgery. Anesthesia & Analgesia, 140(4). 811–820. https://journals.lww.com/anesthesia-analgesia/abstract/2025/04000/an_updated_systematic_review_and_meta_analysis_of.10.aspx

60. Mijwel, S. et al. (2020). Effects of exercise on chemotherapy completion and hospitalization rates: The OptiTrain breast cancer trial. The Oncologist, 25(1), 23–32. https://academic.oup.com/oncolo/article/25/1/23/6443359

61. Allen, G. et al. (2025). Association of change in physical activity with use of outpatient specialist care and hospitalisations among breast cancer survivors with type 2 diabetes in Sweden. British Journal of Cancer, 133, 655–664. https://www.nature.com/articles/s41416-025-03099-x

62. Office of Impact Analysis. (2026). Value of statistical life guidance note. Department of the Prime Minister and Cabinet, Australian Government. https://oia.pmc.gov.au/sites/default/files/2026-02/value-statistical-life-guidance-note.pdf

63. Cullen et al. (2018). Workplace and system-based interventions on return-to-work and recovery for musculoskeletal and mental health conditions: a systematic review. Occupational & Environmental Medicine, 75(2): A549. https://oem.bmj.com/content/75/Suppl_2/A549.2

64. Dibben, G. et al. (2023). Exercise-based cardiac rehabilitation for coronary heart disease: A meta-analysis. European Heart Journal, 44(6), 452–469. https://academic.oup.com/eurheartj/article/44/6/452/7028725

65. Dibben, G. et al. (2021). Exercise-based cardiac rehabilitation for coronary heart disease. Cochrane Database of Systematic Reviews, 2021(11), CD001800. https://pubmed.ncbi.nlm.nih.gov/34741536/

66. Thomas, E. et al. (2019). Effect of cardiac rehabilitation on 24-month all-cause hospital readmissions: A prospective cohort study. European Journal of Cardiovascular Nursing, 18(3), 234–244. https://pubmed.ncbi.nlm.nih.gov/30547678/

67. Toubes-Navarro, M. et al. (2023). A pulmonary rehabilitation program reduces hospitalizations in chronic obstructive pulmonary disease patients: A cost-effectiveness study. Annals of Thoracic Medicine, 18(4), 190–198. https://pubmed.ncbi.nlm.nih.gov/38058789/

68. Toubes-Navarro, M. et al. (2023). A pulmonary rehabilitation program reduces hospitalizations in chronic obstructive pulmonary disease patients: A cost-effectiveness study. Annals of Thoracic Medicine, 18(4), 190–198. https://pubmed.ncbi.nlm.nih.gov/38058789/

69. Meneses-Echavez, J. et al. (2023). Pulmonary rehabilitation for acute exacerbations of COPD: A systematic review. Respiratory Medicine, 219, 107425. https://www.sciencedirect.com/science/article/pii/S095461112300313X

70. Lu, H. et al. (2023). Effects of early pulmonary rehabilitation on hospitalized patients with acute exacerbation of chronic obstructive pulmonary disease: A systematic review and meta-analysis. International Journal of Chronic Obstructive Pulmonary Disease, 18, 907–919. https://pmc.ncbi.nlm.nih.gov/articles/PMC10198174/

71. Moore, E. et al. (2016). Pulmonary rehabilitation as a mechanism to reduce hospitalizations for acute exacerbations of COPD: A systematic review and meta-analysis. Chest, 150(4), 837–859. https://pubmed.ncbi.nlm.nih.gov/27497743/

72. Cecins, N. et al. (2008). Reduction in hospitalisation following pulmonary rehabilitation in patients with COPD. Australian Health Review, 32(3), 415–422. https://pubmed.ncbi.nlm.nih.gov/18666869/

73. Pocovi, N. et al. (2024). Effectiveness and cost-effectiveness of an individualised, progressive walking and education intervention for the prevention of low back pain recurrence in Australia: A randomised controlled trial. The Lancet, 404(10448), 134–144. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(24)00755-4/fulltext

74. Sherrington, C. et al. (2019). Exercise for preventing falls in older people living in the community. Cochrane Database of Systematic Reviews, 2019(1), CD012424. https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012424.pub2/full

75. Skou, S. et al. (2018). Total knee replacement and non-surgical treatment of knee osteoarthritis: 2-year outcome from two parallel randomized controlled trials. Osteoarthritis and Cartilage, 26(9), 1170–1180. https://www.sciencedirect.com/science/article/pii/S1063458418312214

76. El-Khoury, F. et al. (2013). The effect of fall prevention exercise programmes on fall induced injuries in community dwelling older adults: Systematic review and meta-analysis of randomised controlled trials. BMJ, 347, f6234. https://www.bmj.com/content/347/bmj.f6234

77. Singh, B. et al. (2023). Effectiveness of physical activity interventions for improving depression, anxiety and distress: An overview of systematic reviews. British Journal of Sports Medicine, 57(18), 1203–1209. https://researchnow-admin.flinders.edu.au/ws/files/70218883/Singh_Effectiveness_P2023.pdf

78. Gordon, B. et al. (2018). Association of efficacy of resistance exercise training with depressive symptoms: Meta-analysis and meta-regression analysis of randomized clinical trials. JAMA Psychiatry, 75(6), 566–576. https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2680311

79. Kim, M. et al. (2023). Effects of exercise on positive symptoms, negative symptoms, and depression in patients with schizophrenia: A systematic review and meta-analysis. International Journal of Environmental Research and Public Health, 20(4), 3719. https://www.mdpi.com/1660-4601/20/4/3719

80. Kubiak, J. & Sklar, M. (2022). Relationship of exercise and hospital readmission after spinal cord injury: A secondary analysis. American Journal of Occupational Therapy, 76(1), 7601180070. https://pubmed.ncbi.nlm.nih.gov/34962515/

81. Kannarkat, G. et al. (2022). Effect of exercise and rehabilitation therapy on risk of hospitalization in Parkinson's disease. Movement Disorders Clinical Practice, 9(4), 494–500. https://pmc.ncbi.nlm.nih.gov/articles/PMC9092731/#mdc313456-sec-0011

82. Izquierdo-Gomez, R. et al. (2024). The role of physical activity in the association between disability and mortality among US older adults: A nationwide prospective cohort study. GeroScience, 46, 3275–3285. https://pmc.ncbi.nlm.nih.gov/articles/PMC11009203/

83. Gill, T. et al. (2017). The effect of intervening hospitalizations on the benefit of structured physical activity in promoting independent mobility among community-living older persons: Secondary analysis of a randomized controlled trial. BMC Medicine, 15, 65. https://link.springer.com/article/10.1186/s12916-017-0824-6

84. Mizrahi, D. et al. (2024). Effect of exercise interventions on hospital length of stay and admissions during cancer treatment: A systematic review and meta-analysis. British Journal of Sports Medicine, 58(2), 97–109. https://bjsm.bmj.com/content/58/2/97.long

85. Steffens, D. et al. (2025). An updated systematic review and meta-analysis of unimodal prehabilitation with exercise intervention to enhance postoperative outcomes in cancer surgery. Anesthesia & Analgesia, 140(4). 811–820. https://journals.lww.com/anesthesia-analgesia/abstract/2025/04000/an_updated_systematic_review_and_meta_analysis_of.10.aspx

86. Mijwel, S. et al. (2020). Effects of exercise on chemotherapy completion and hospitalization rates: The OptiTrain breast cancer trial. The Oncologist, 25(1), 23–32. https://academic.oup.com/oncolo/article/25/1/23/6443359

87. Allen, G. et al. (2025). Association of change in physical activity with use of outpatient specialist care and hospitalisations among breast cancer survivors with type 2 diabetes in Sweden. British Journal of Cancer, 133, 655–664. https://www.nature.com/articles/s41416-025-03099-x

88. Department of Health and Aged Care. (2025). Medicare Benefits Schedule - Item 23. Australian Government. https://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=23

89. Department of Health and Aged Care. (2025). Medicare Benefits Schedule - Item 36. Australian Government. https://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=36

90. Department of Health and Aged Care. (2025). Medicare Benefits Schedule - Item 80110. Australian Government. https://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=80110

91. Safe Work Australia. (2025). National Return to Work Survey: Analytical Report, November 2025. Safe Work Australia. https://data.safeworkaustralia.gov.au/sites/default/files/2025-11/NRTW_Survey_Analysis_Report_Nov2025.pdf

92. Noone Survey, Deloitte Access Economics, Safe Work Australia. (2026). Internal survey data.

93. Australian Bureau of Statistics. (2024). Average Weekly Earnings, Australia. ABS. https://www.abs.gov.au/statistics/labour/earnings-and-working-conditions/average-weekly-earnings-australia/latest-release. (Calculation based on average weekly earnings divided by 40 working hours).

Limitation of our work

General use restriction

This report is prepared solely for the use of Exercise and Sports Science Australia. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The report has been prepared for the purpose of assisting Exercise and Sports Science Australia to estimate the value of accredited Exercise Physiologists in Australia. You should not refer to or use our name or the advice for any other purpose.

Deloitte Touche Tohmatsu
477 Collins ST,
Melbourne VIC 3000

+61 2 9322 7000
www.deloitte.com.au